



TO: HOLDERS OF PORTABLE OXYGEN BREATHING EQUIPMENT
(5500 SERIES AND 5600 SERIES)

COMPONENT MAINTENANCE MANUAL WITH IPL

REVISION NO. 10 DATED MAY 31, 1989

HIGHLIGHTS

Pages which have been revised are outlined below with the highlights of the revision. Please delete the affected pages and enter Revision No. 10 dated May 31/89 to the Record of Revision Sheet.

Chapter/Section and Page No.	Description of Change	Effectivity
35-30-78 Record of Revisions List of Effective Pages	Revised to reflect current revision	All Models
35-30-78 Page 4	Added "Y" configuration in Constant Flow Settings column	5600 Series
35-30-78 Page 6	Revised figure 4 to show proper configuration	All Models
35-30-78 Page 104	Part number 36728-01 was 36738-01 in NOTE following step (6); added 0.7 and 4.5 flow data to Figure 102	All Models
35-30-78 Page 301 and 302	Added 800649 Pressure Demand regulator to paragraph 3 title; added new steps B. and C.; renumbered existing steps; revised step A. to reflect items 12 and 9; editorial change	All Models and 5600 Series
35-30-78 Page 304	Editorial change	All Models
35-30-78 Page 401	Deleted Di-Sanite and added Fisan-Enzodent in Table 401	All Models
35-30-78 Page 403	Fisan-Enzodent was Di-Sanite	All Models



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

HIGHLIGHTS (CONT'D)

Chapter/Section and Page No.	Description of Change	Effectivity
35-30-78 Page 701	Added lockwire to Table 701	All Models
35-30-78 Page 703 through 708	Body item number (49 or 49A) was (49)	All Models
35-30-78 Page 705	Added item 14A two places and lockwire data in step K.; editorial change	All Models
35-30-78 Page 706, 707 and 708	Added items 12, 15 and 9 to step F.; editorial change; added steps G., H. and I; relocated material	5600 Series
35-30-78 Page 901	Added index number to Figure 902	All Models
35-30-78 Page 1002	Added vendor code V21343; name and address	All Models
35-30-78 Page 1007	Added "Y" configuration to Constant Flow Setting column	5600 Series
35-30-78 Page 1009 through 1037	Revised and added part numbers; revised IPL Figure 3 to incorporate breakdown of pressure demand cover assembly; incorporated editorial changes; relocated material	All Models
35-30-78 Page 7, 101, 102, 103, 105, 106, 107, 108, 109, 110, 403, 602, 706, 708	Added metric equivalent values	All Models



ata

MANUAL

**COMPONENT MAINTENANCE
MANUAL WITH IPL**

PORTABLE OXYGEN BREATHING EQUIPMENT

5500 SERIES

5600 SERIES

H-78

SCOTT®

SCOTT AVIATION • A FIGGIE INTERNATIONAL COMPANY
Lancaster, New York 14086

PRINTED IN U.S.A.

35-30-78

T-1
Jan 25/83

SCOTT

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

RECORD OF REVISIONS

REV NO.	ISSUE DATE	DATE INSERTED	BY	REV NO.	ISSUE DATE	DATE INSERTED	BY
1	Dec 18/64						
2	Feb 23/65						
3	Mar 1/67						
4	Mar 16/68						
5	Sep 1/69						
6	May 15/73						
7	Dec 31/79						
8	Jan 25/83						
9	Jan 31/86						
10	May 31/89						

35-30-78

RR-1
May 31/89

SCOTT

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

RECORD OF TEMPORARY REVISIONS

TEMPORARY REV. NO.	PAGE NUMBER	ISSUE DATE	BY	DATE REMOVED	BY

35-30-78

TR-1
Jan 25/83

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

NUMBER	REV	DATE INCORP	BY	NUMBER	REV	DATE INCORP	BY
35-48		Jan 25/83	Scott				

SB-1
Jan 25/83

SCOTT
5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

LIST OF EFFECTIVE PAGES

Insert latest revised pages, destroy superseded pages.

*The asterisk indicates pages revised by the current revision.

<u>SUBJECT</u>	<u>PAGE</u>	<u>DATE</u>
Title	T-1	Jan 25/83
Record of Revisions	*RR-1	May 31/89
Temporary Revisions	TR-1	Jan 25/83
Service Bulletin List	SB-1	Jan 25/83
List of Effective Pages	*LEP-1	May 31/89
	*LEP-2	May 31/89
	*LEP-3	May 31/89
Table of Contents	T/C-1	Jan 25/83
Introduction	INTRO-1	Jan 25/83
	INTRO-2	Jan 25/83
Description and Operation	1	Jan 25/83
	2	Jan 31/86
	3	Jan 31/86
	* 4	May 31/89
	5	Jan 25/83
	6	Jan 25/83
	* 7	May 31/89
	8	Jan 25/83
	9	Jan 25/83
	10	Jan 25/83
	11	Jan 25/83
	12	Blank
Testing and Fault Isolation	* 101	May 31/89
	* 102	May 31/89
	* 103	May 31/89
	* 104	May 31/89
	* 105	May 31/89
	* 106	May 31/89
	* 107	May 31/89
	* 108	May 31/89
	* 109	May 31/89
	* 110	May 31/89
	111	Jan 25/83
	112	Jan 25/83
	113	Jan 25/83
	114	Jan 25/83
Disassembly	* 301	May 31/89
	* 302	May 31/89
	303	Jan 25/83
	* 304	May 31/89
	305	Jan 31/86
	306	Blank

35-30-78

LEP-1
May 31/89



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

LIST OF EFFECTIVE PAGES - continued

<u>SUBJECT</u>	<u>PAGE</u>	<u>DATE</u>
Cleaning	* 401	May 31/89
	402	Jan 25/83
	* 403	May 31/89
	404	Jan 25/83
Check	501	Jan 31/86
	502	Blank
Repair	601	Jan 31/86
	* 602	May 31/89
Assembly	* 701	May 31/89
	702	Jan 25/83
	* 703	May 31/89
	* 704	May 31/89
	* 705	May 31/89
	* 706	May 31/89
	* 707	May 31/89
	* 708	May 31/89
	801	Jan 25/83
	802	Blank
	* 901	May 31/89
	902	Blank
Special Tools, Fixtures and Test Equipment	1001	Jan 25/83
Illustrated Parts List	*1002	May 31/89
	1003	Jan 25/83
	1004	Jan 25/83
	1005	Jan 25/83
	1006	Jan 31/86
	*1007	May 31/89
	1008	Jan 31/86
	*1009	May 31/89
	*1010	May 31/89
	*1011	May 31/89
	*1012	May 31/89
	*1013	May 31/89
	*1014	May 31/89
	*1015	May 31/89
	1016	Jan 25/83
	*1017	May 31/89
	*1018	May 31/89
	1019	Jan 25/83
	1020	Jan 25/83
	1021	Jan 25/83
	*1022	May 31/89
	1023	Jan 31/86
	1024	Jan 31/86
	*1025	May 31/89

35-30-78

LEP-2

May 31/89

SCOTT

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

LIST OF EFFECTIVE PAGES - continued

<u>SUBJECT</u>	<u>PAGE</u>	<u>DATE</u>	
Illustrated Parts List (cont'd)	1026	Jan 31/86	
	*1027	May 31/89	
	1028	Jan 31/86	
	1029	Jan 31/86	
	1030	Jan 31/86	
	1031	Jan 31/86	
	*1032	May 31/89	
	1033	Jan 31/86	
	1034	Jan 31/86	
	1035	Jan 31/86	
	*1036	May 31/89	
	*1037	May 31/89	
	*1038	May 31/89	

35-30-78
LEP-3
May 31/89



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

TABLE OF CONTENTS

<u>SUBJECT</u>	<u>PAGE</u>
Description and Operation	1
Testing and Fault Isolation	101
Automatic Test Requirements (Atlas) (Not Applicable)	201
Disassembly	301
Cleaning	401
Check	501
Repair	601
Assembly	701
Fits and Clearances	801
Special Tools, Fixtures and Test Equipment	901
Illustrated Parts List	1001

35-30-78

T/C-1

Jan 25/83



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

INTRODUCTION

This manual establishes the proper maintenance procedures which shall be followed by user maintenance, overhaul and service personnel when performing any type of service on the 5500 Series and 5600 Series Portable Oxygen Units described herein.

It is the primary intent of this manual:

- a. To specify proper safety regulations to be followed during performance of service on oxygen equipment used in aviation applications.
- b. To establish proper sequence of operations to be performed on the defined equipment.
- c. To provide the user with the data necessary to properly maintain, check, test and repair the equipment.

The following WARNINGS are presented to inform the user of this manual of the requirements which shall be adhered to when performing service procedures on this equipment. Additional WARNINGS will be found in the procedural steps in the manual.

WARNING: ANY SERVICE OR OVERHAUL PERFORMED ON THIS APPARATUS SHALL BE DONE ONLY BY THOSE FACILITIES EXPERIENCED IN, OR BY PERSONNEL KNOWLEDGEABLE IN AVIATION OXYGEN EQUIPMENT. IF NONE ARE KNOWN, CONTACT SCOTT AVIATION OR ITS DISTRIBUTORS FOR NAMES OF AUTHORIZED SERVICE CENTERS.

WARNING: ALL PROCEDURES DESCRIBED IN THIS MANUAL SHALL BE PERFORMED IN AN AREA FREE OF OIL, GREASE, FLAMMABLE SOLVENTS OR OTHER COMBUSTIBLE MATERIALS. SUCH MATERIALS, AS WELL AS DUST, LINT, AND FINE METAL FILINGS ARE ALL POTENTIAL COMBUSTIBLES WHICH MIGHT, WHEN EXPOSED TO OXYGEN UNDER PRESSURE IGNITE AND RESULT IN AN EXPLOSION AND/OR FIRE.

WARNING: DO NOT ALLOW OIL, GREASE, FLAMMABLE SOLVENTS, OR OTHER COMBUSTIBLE MATERIALS TO COME IN CONTACT WITH PARTS THAT WILL BE EXPOSED TO PRESSURIZED OXYGEN. SUCH MATERIALS, AS WELL AS DUST, LINT, AND FINE METAL FILINGS ARE ALL POTENTIAL COMBUSTIBLES WHICH MIGHT, WHEN EXPOSED TO OXYGEN UNDER PRESSURE, IGNITE AND RESULT IN AN EXPLOSION.

35-30-78

INTRO-1

Jan 25/83

SCOTT

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

Verification

Section

Date

**Testing and Fault Isolation
Disassembly
Assembly**

**October 14, 1982
October 14, 1982
October 14, 1982**

35-30-78

INTRO-2

Jan 25/83



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

PORTABLE OXYGEN BREATHING EQUIPMENT

DESCRIPTION AND OPERATION

1. General

- A. This manual provides overhaul instructions with illustrated parts list for the 5500 series and 5600 series Portable Oxygen Breathing Units.
- B. The instructions in this manual apply to all assemblies unless specific reference is made to a particular part number.

2. Description

- A. Each of the various assemblies (see figure 1) consists of an oxygen cylinder (1), pressure regulator (2), "ON-OFF" valve (3), relief valve (4), safety plug (5), charging valve (6), constant flow mask outlet assembly (7), and gauge (8). In addition the 5600 series contains a demand type or pressure demand type oxygen regulator (9). The part number of a particular assembly is determined by the part numbers of the various components that make up the assembly.

3. Leading Particulars. See figures 2 and 3 for leading particulars.

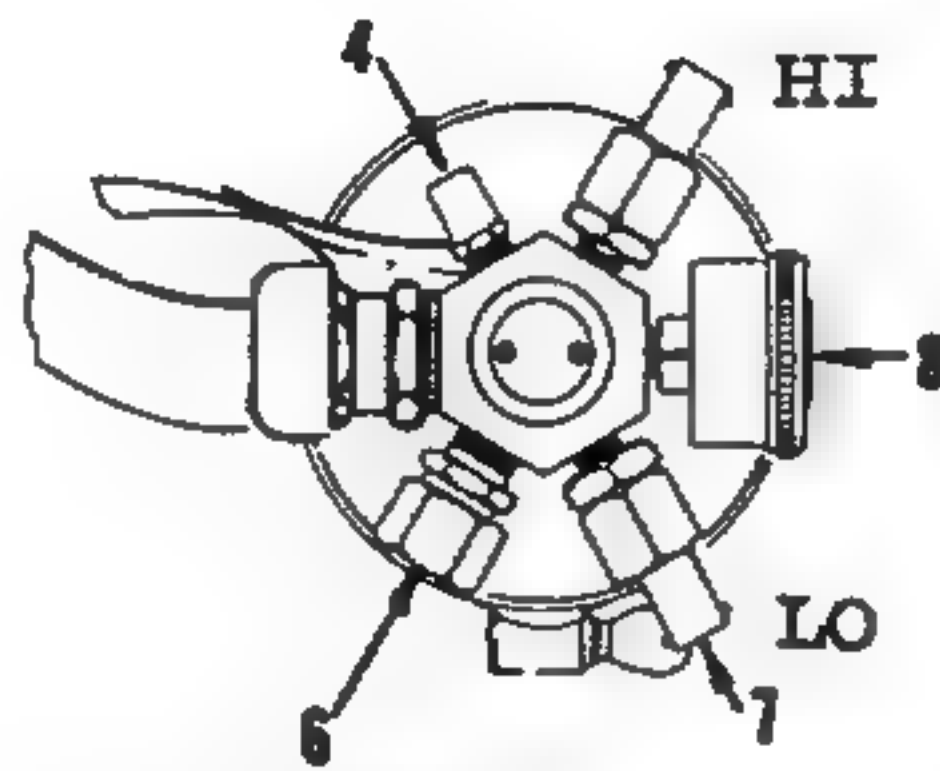
4. Purpose of Equipment

- A. This equipment provides a portable oxygen breathing source. The 5500 series contains outlet assemblies used to adapt a rebreather type mask. The rebreather type mask provides the user with supplementary oxygen for high altitude breathing and/or therapeutic use. The 5600 series provides oxygen for the above uses and, in addition, provides a walk-around oxygen supply for a demand type mask suitable for smoke and fume protection.

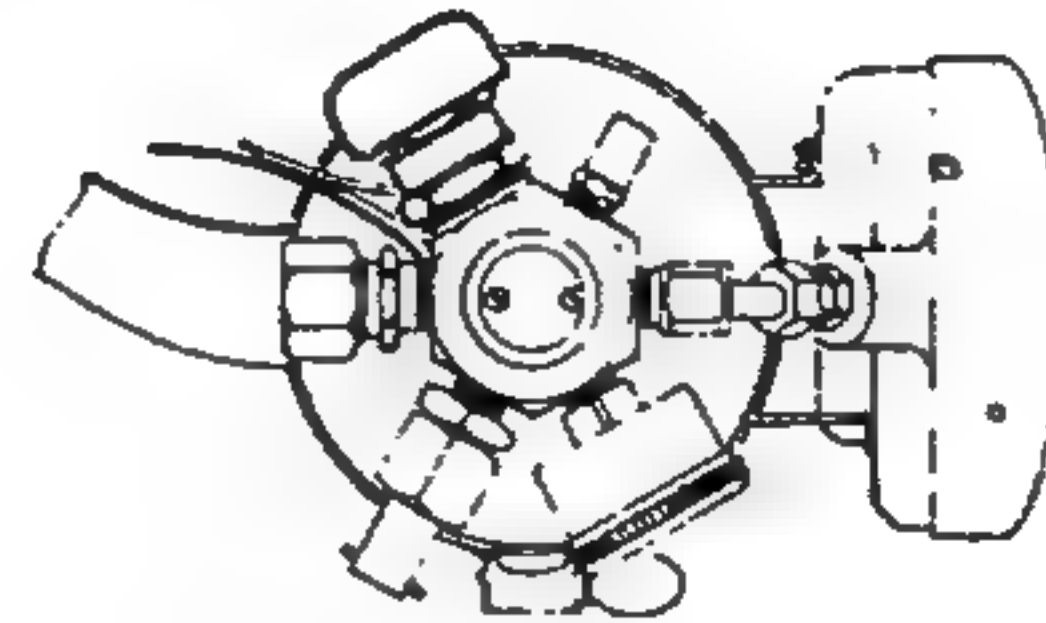
5. Typical Installation

- A. All assemblies are completely portable and have a carrying strap. They should be stored in a convenient and accessible location.

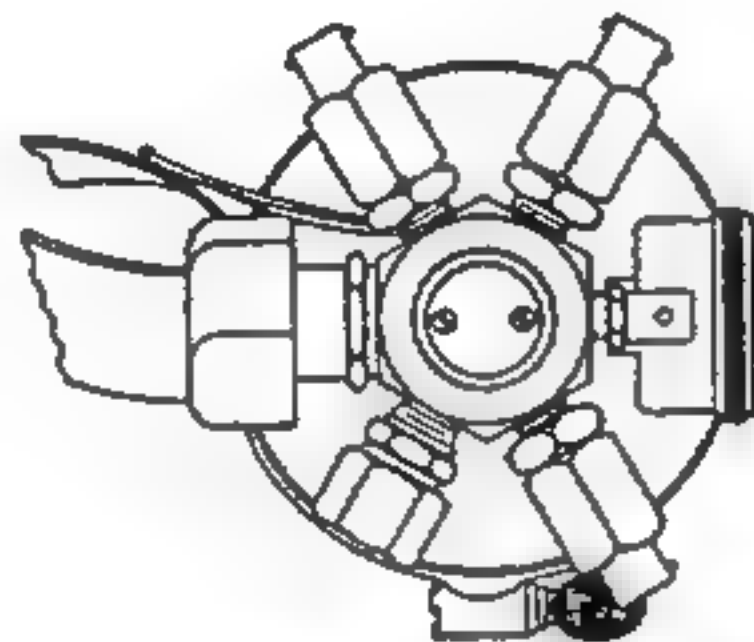
5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



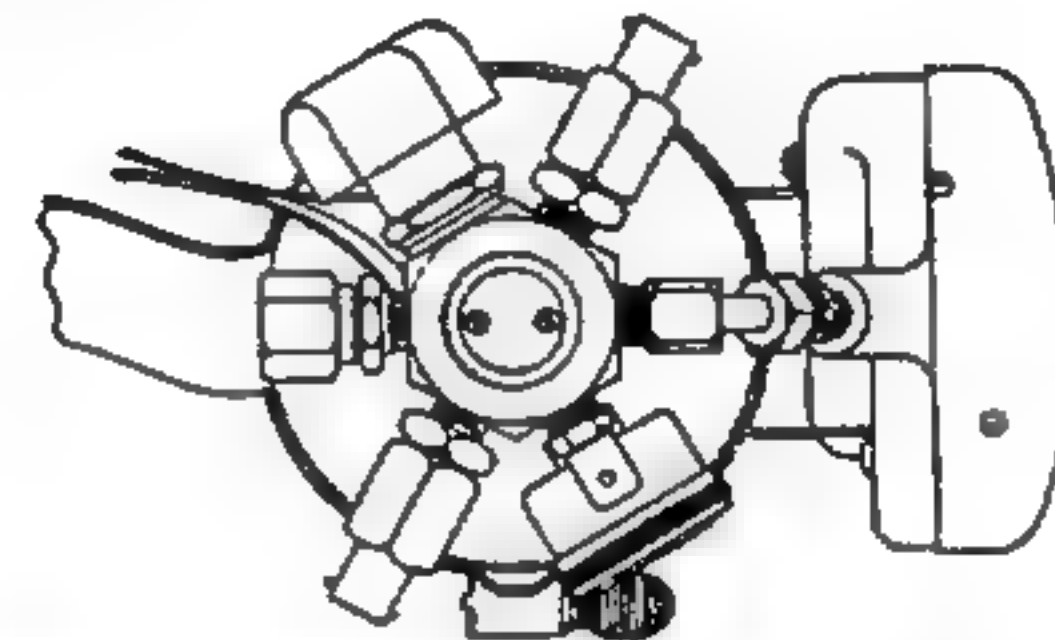
Two Constant Flow Outlets



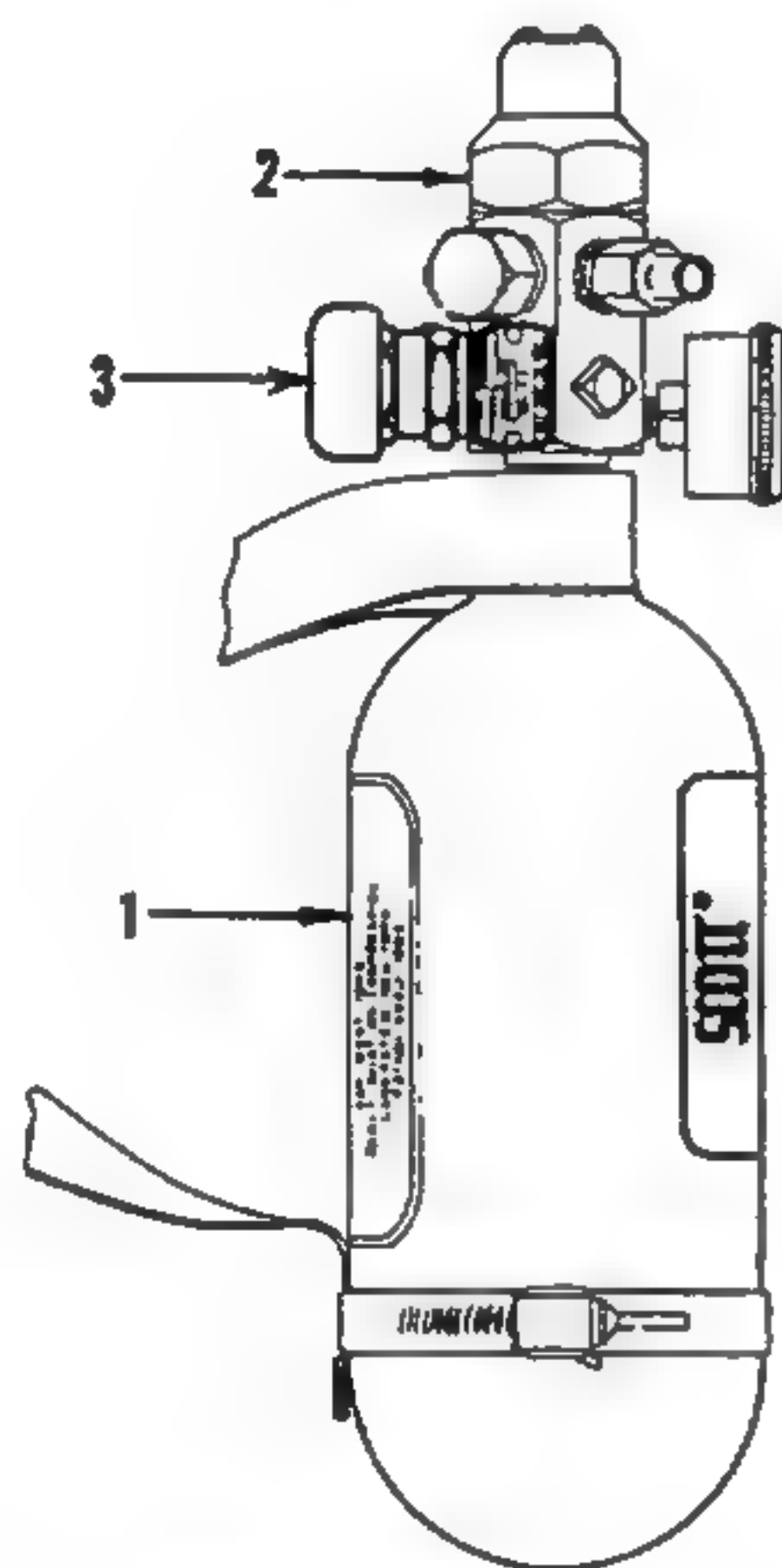
One Constant Flow Outlet



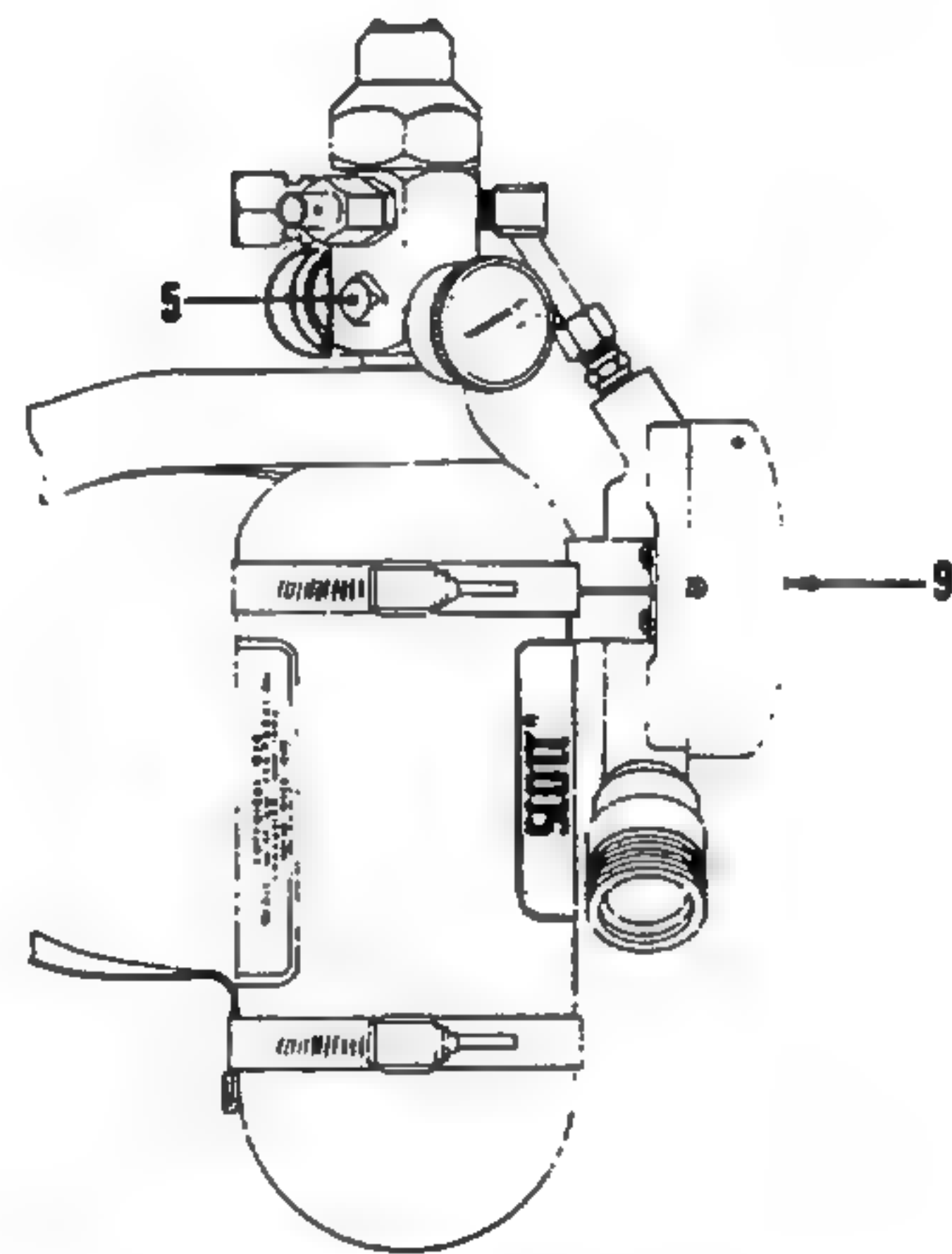
Three Constant Flow Outlets



Two Constant Flow Outlets



5500 Series



5600 Series

- | | | |
|-------------------|-----------------------------|---------------------|
| 1. CYLINDER | 4. RELIEF VALVE (LOW PRESS) | 7. OUTLET ASSEMBLY |
| 2. PRES REGULATOR | 5. SAFETY PLUG | 8. PRESSURE GAUGE |
| 3. "ON-OFF" VALVE | 6. CHARGING VALVE | 9. DEMAND REGULATOR |

Portable Oxygen Breathing Equipment
Figure 1

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

5500-A1A-A5A

BASIC SERIES NO.

CONSTANT
FLOW
SETTINGS
AT 147 PSI
AT 0°C

CYLINDER AND REGULATOR ASSEMBLY										CYLINDER FINISH		HARNES		ALTITUDE		OUTLET STYLE	
CYLINDER PART NO	CAPACITY (CU FT)	EST TOTAL WT (LBS) (BRASS)	CYL "T" THREAD IN ANPT	REGULATOR ASSY		NO	COLOR	LTR	PART NO	LTR	FLOW (LIT/MIN)	NO	FEET	LTR	OUTLET PART NO	DESCRIPTION	
				AL ALY	BRASS												
6084-1	4.25	5.76	1/2	5510	5510-10	1	Gray-Green	A	801800-00	A	0.5	0	0	A	5009-00	Outlet Assembly (AN)	
6084-2	7.15	7.19	1/2	5510	5510-10		Green with Lettering	B	801858-00	B	2	5	5,000	B	5041-00	Outlet Assembly (ARO)	
6084-3	11.0	9.50	1/2	5510	5510-10		Blue with White Lettering	C	801807-00	C	2.5	6	6,000	C	5052-00	Outlet Assembly (Heidbrink)	
6084-4	22.0	15.32	1	5510-3	5510-13	3	White	D	801860-01	D	2.7	7	7,000	D	5507-00	Outlet Assembly (Puritan)	
6084-5	26.6	18.41	1	5510-3	5510-13		Lettering	E	801860-03	E	3	8	8,000	E	8572-02	Outlet Assembly (Full open)	
6084-6	38.4	21.92	1	5510-3	5510-13		Green with Yellow Neck	F	801860-05	F	4	9	9,000	K	6818-00	Plug (Allen socket)	
6084-7	48.3	29.72	1	5510-3	5510-13	5	Wakefield	G	801863-00	G	7	10	10,000	L	800503-00	Outlet Assembly (Full open)	
6084-2	7.15	7.04	1/2	5510-4	5510-14		Green with Yellow Neck	P	801800-00	H	8	11	11,000	M	10003556	Outlet Assembly (Puritan Type)	
6084-1	4.25	5.76	1/2	5510-5	5510-15		Wakefield	Q	801807-01	K	0.7	12	12,000	N	38728-01	110111-09 (Unmetered)	
6084-2	7.15	7.19	1/2	5510-5	5510-15	6	Green	R	801808-01	L	4.5	13	13,000			Outlet Assembly (Eras)	
6084-3	11.0	9.50	1/2	5510-5	5510-15		Green with Pleacards	S	801807-02	X	0	14	14,000			P/N DFB 153	
6084-4	22.0	15.32	1	5510-7	5510-17	9	Wakefield	T	801807-03	Y	Full Flow	15	15,000	P	802883-01	Outlet Assembly (Cessna)	
6084-4	22.0	15.32	1	5510-9	5510-19		Green with Pleacards	U	801808-02			16	16,000	R	10006017	Outlet Assembly (Lockheed)	
6084-6	38.4	21.92	1	5510-17	5510-17			V	801808-03			17	17,000				
6084-3	11.0	9.50	1/2	5510-20	5510-20			W	803177-01			18	18,000				
								X	Omit Harness			19	19,000				
												20	20,000				
												21	21,000				
												22	22,000				
												23	23,000				
												24	24,000				
												25	25,000				
												26	26,000				
												27	27,000				
												28	28,000				
												29	29,000				
												30	30,000				

Weights for Aluminum alloy bodies are 0.9 lbs lighter than those shown for equivalent Brass bodies

Effective April 1, 1982 the configurations in this column no longer available

These configurations to be used when 3 constant flow outlets are required

Weights for Aluminum alloy bodies are 0.9 lbs lighter than those shown for equivalent Brass bodies
Effective April 1, 1982 the configurations in this column no longer available
These configurations to be used when 3 constant flow outlets are required

Leading Particulars (Sheet 1 of 2)
Figure 2

35-30-78

5000

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

5500-1A1A - A5A									
BASIC SERIES NO.									
CONSTANT FLOW SETTINGS AT 14.7 PSI AT 0°C									
CYLINDER AND REGULATOR ASSEMBLY									
RESPIRATOR REGULATOR									
NO	REGULATOR PART NO	DESCRIPTION	LTR	CYLINDER PART NO	CAPACITY (CU FT)	EST TOTAL WT (LB) (BRASS)	CYL "T" THREAD IN ANPT	REGULATOR ASSY AL ALTY BRASS	NO
1	6379-2C	Includes 5603 adapter for 6210 hose coupling	A	6084 1	4.75	8.45	1/2	5510	1
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
2	6379-2D	Includes 5606 adapter for AN type quick disconnect	A	6084 1	4.75	8.45	1/2	5510	2
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
3	6379-2E	Pressure Demand Regulator includes 5603 adapter for 6210 hose coupling	A	6084 1	4.75	8.45	1/2	5510	3
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
4	6379-2F	Pressure Demand Regulator includes 5606 adapter for AN type quick disconnect	A	6084 1	4.75	8.45	1/2	5510	4
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
5	6379-2G	Pressure Demand Regulator includes 5603 adapter for 6210 hose coupling	A	6084 1	4.75	8.45	1/2	5510	5
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
6	6379-2H	Pressure Demand Regulator includes 5606 adapter for AN type quick disconnect	A	6084 1	4.75	8.45	1/2	5510	6
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
7	6379-2I	Pressure Demand Regulator includes 5603 adapter for 6210 hose coupling	A	6084 1	4.75	8.45	1/2	5510	7
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
8	6379-2J	Pressure Demand Regulator includes 5606 adapter for AN type quick disconnect	A	6084 1	4.75	8.45	1/2	5510	8
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
9	6379-2K	Pressure Demand Regulator includes 5603 adapter for 6210 hose coupling	A	6084 1	4.75	8.45	1/2	5510	9
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
10	6379-2L	Pressure Demand Regulator includes 5606 adapter for AN type quick disconnect	A	6084 1	4.75	8.45	1/2	5510	10
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
11	6379-2M	Pressure Demand Regulator includes 5603 adapter for 6210 hose coupling	A	6084 1	4.75	8.45	1/2	5510	11
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
12	6379-2N	Pressure Demand Regulator includes 5606 adapter for AN type quick disconnect	A	6084 1	4.75	8.45	1/2	5510	12
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
13	6379-2O	Pressure Demand Regulator includes 5603 adapter for 6210 hose coupling	A	6084 1	4.75	8.45	1/2	5510	13
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75	8.45	1/2	5510-5A	
			L	6084 2	7.15	7.89	1/2	5510-5A	
			M	6084 3	11.0	10.21	1/2	5510-5A	
			N	6084 4	22.0	16.16	1	5510-8	
14	6379-2P	Pressure Demand Regulator includes 5606 adapter for AN type quick disconnect	A	6084 1	4.75	8.45	1/2	5510	14
			B	6084 2	7.15	7.89	1/2	5510	
			C	6084 3	11.0	10.21	1/2	5510	
			D	6084 4	22.0	16.16	1	5510-3	
			E	6084 5	28.8	19.26	1	5510-3	
			F	6084 6	38.4	22.76	1	5510-3	
			G	6084 7	48.3	30.56	1	5510-3	
			J	6084 1	4.75				



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

6. Overall Operation

- A. Oxygen is supplied from the high pressure cylinder to the pressure regulator. The safety plug, pressure gauge and "ON-OFF" valve are exposed to cylinder pressure. The "ON-OFF" valve controls the flow of oxygen from the cylinder to the regulating mechanism in the regulator body. It also controls the flow of oxygen from the charging valve to the cylinder.

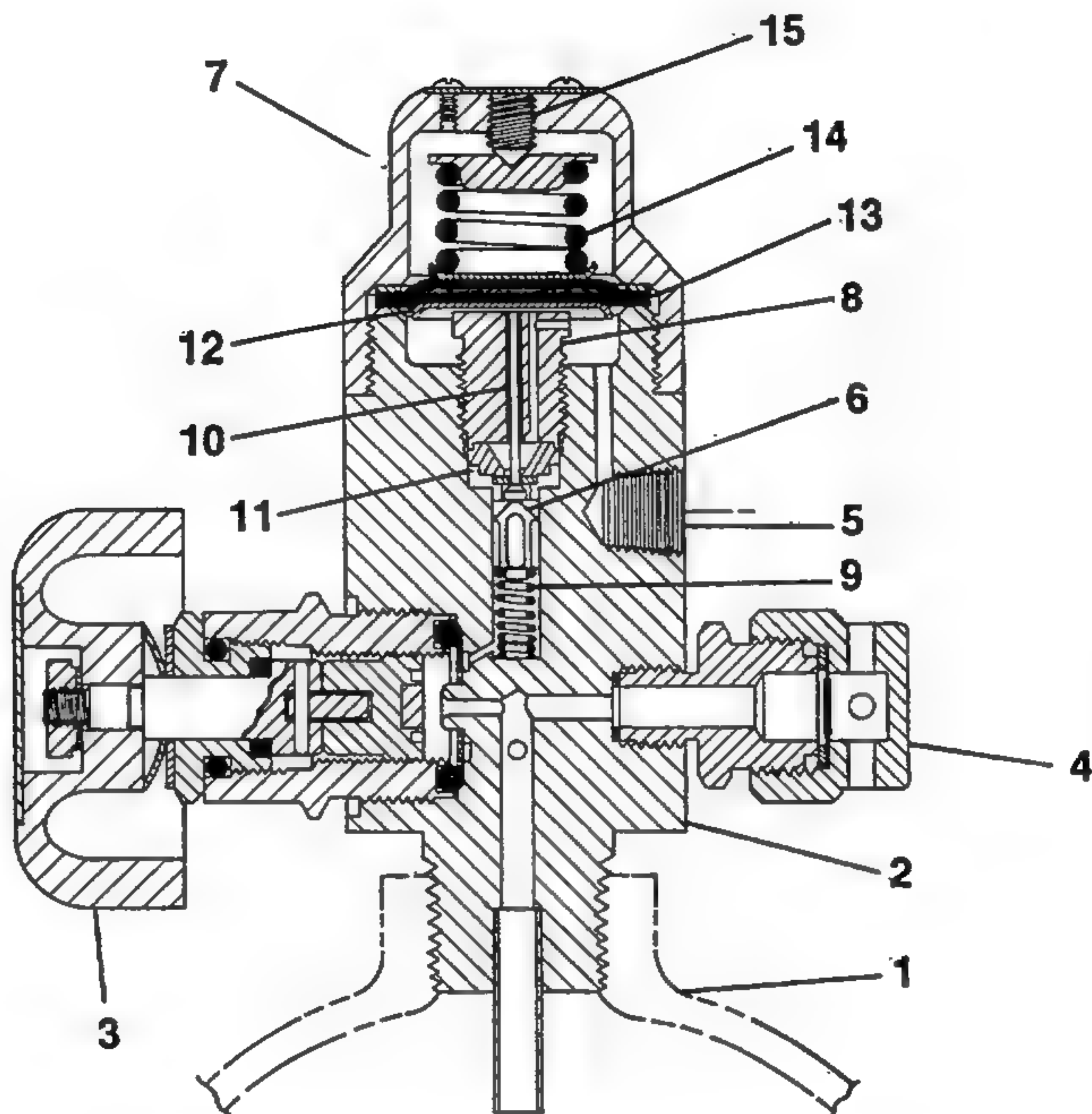
When the valve is in the "OFF" position, oxygen cannot flow through the regulator. The safety plug contains a fusible alloy and burst disc. In the event of excessive heat, the fusible alloy melts, and with subsequent pressure rise, the safety disc ruptures and allows cylinder oxygen to be vented to atmosphere. The pressure gauge indicates the pressure of the oxygen in the cylinder.

- B. When the "ON-OFF" valve is open, oxygen flows into the upper portion of the regulator body, which contains the pressure reducing mechanism. It reduces the cylinder oxygen pressure to a lower pressure which is suitable to supply a rebreather type mask, through the outlet assemblies, or a demand regulator.
- C. The regulator contains a charging valve assembly which enables the cylinder to be filled (recharged) with high pressure oxygen. A relief valve is located in the low pressure portion of the regulator to protect the regulating mechanism against over pressurization.

7. Detailed Operation.

- A. "ON-OFF" Valve. The "ON-OFF" valve (3, figure 4) is a rotary type valve installed in the high pressure portion of the pressure regulator. Rotation of the valve knob in a clockwise direction causes the valve head assembly to seat against a port in the regulator body, thus preventing flow to the upper portion of the regulator. Rotation of the knob in a counterclockwise direction opens the port and allows oxygen to enter the pressure regulating mechanism.

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



- | | | |
|--------------------|---------------------|---------------------|
| 1. CYLINDER | 6. THRUST PIN GUIDE | 11. SEAT |
| 2. REGULATOR | 7. CASE | 12. THRUST PLATE |
| 3. "ON-OFF" VALVE | 8. SEAT HOLDER | 13. DIAPHRAGM |
| 4. SAFETY PLUG | 9. SPRING | 14. SPRING |
| 5. OUTLET ASSEMBLY | 10. THRUST PIN | 15. ADJUSTING SCREW |

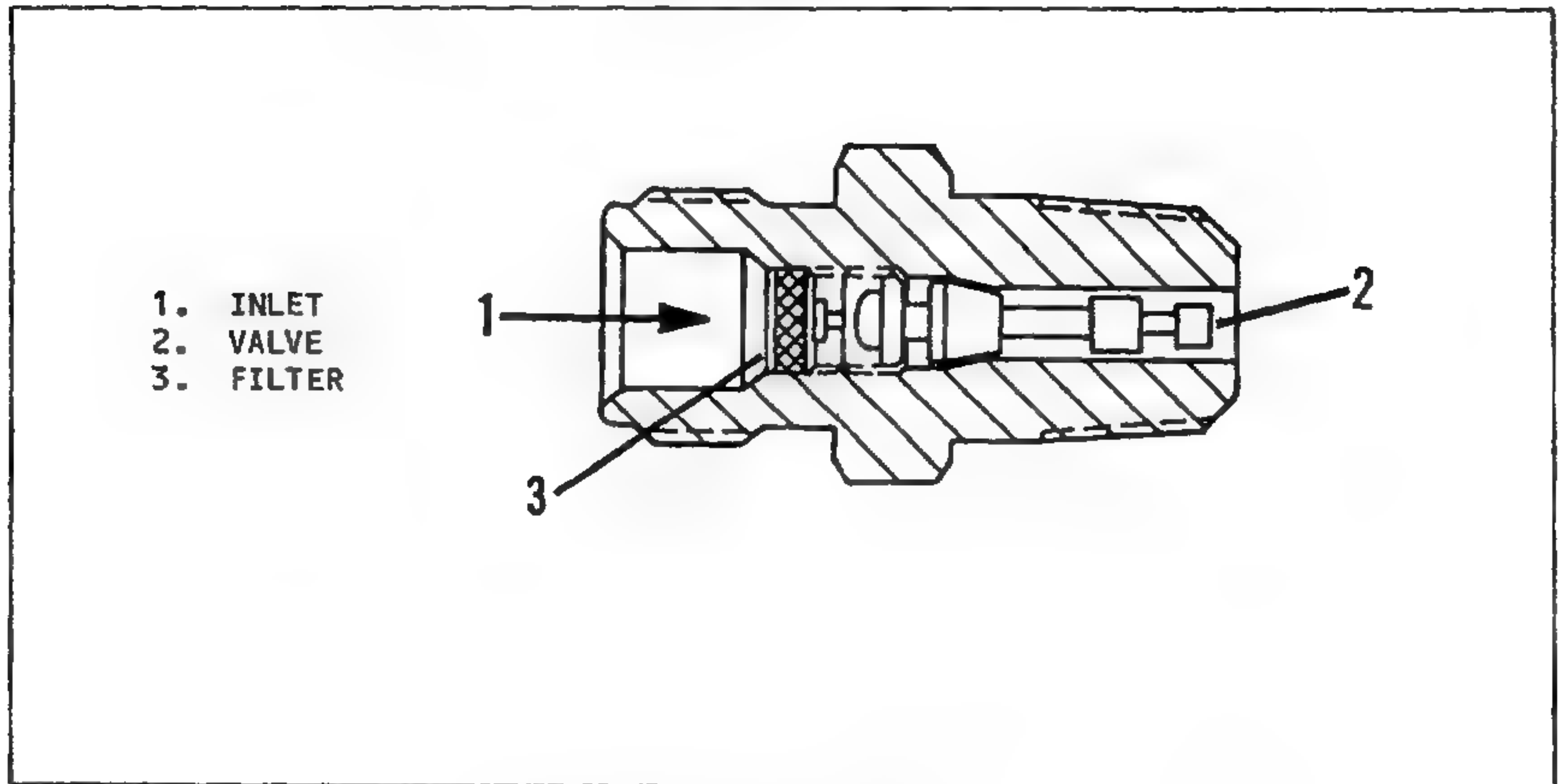
Regulator Cross Section
Figure 4



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

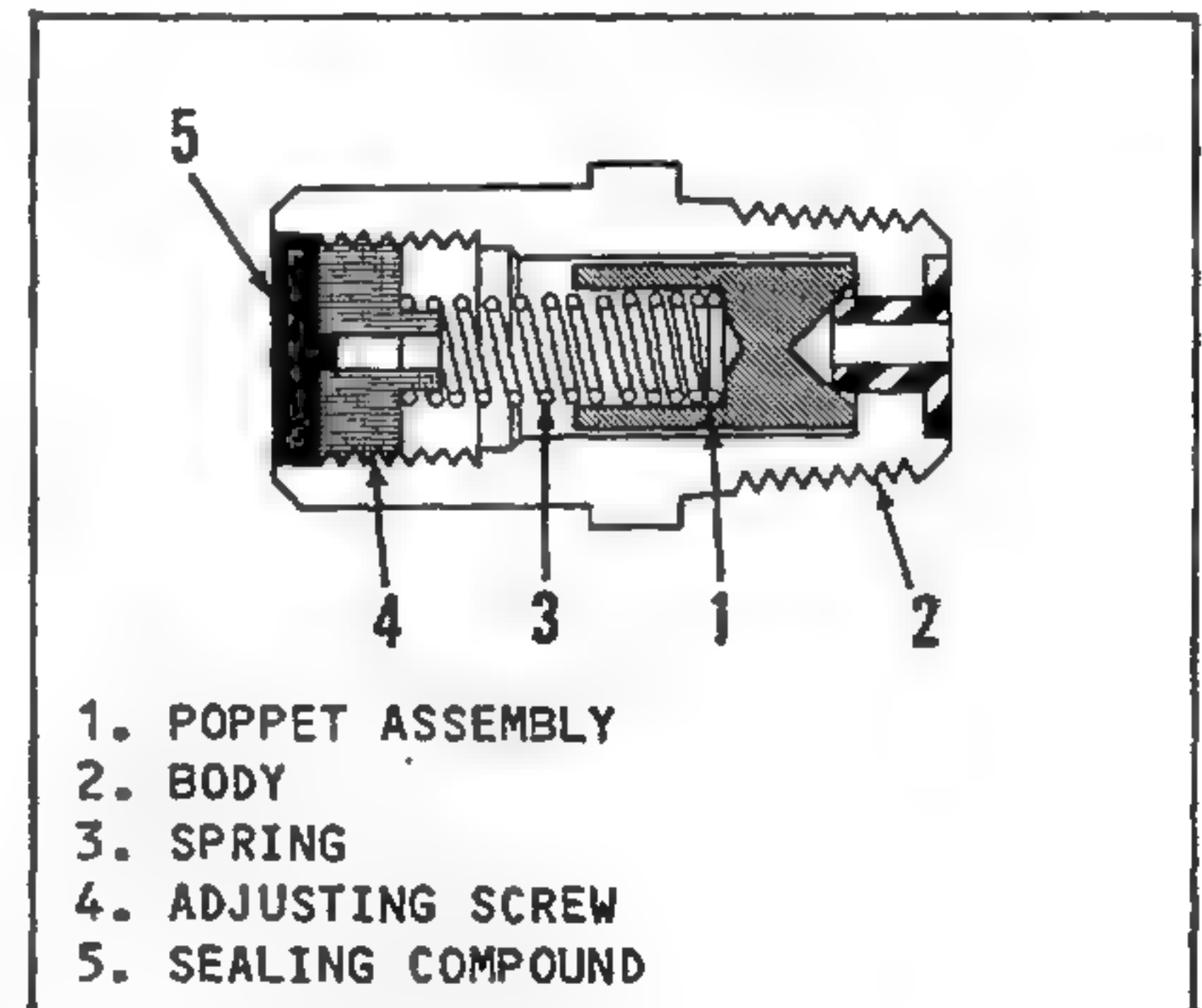
- B. **Safety Plug.** The safety plug (4, figure 4) is installed in the high pressure portion of the regulator. The center of the plug is filled with a low melting point metal alloy. In the event of fire, the alloy melts and with subsequent pressure rise, the safety disc ruptures and allows the oxygen to vent to atmosphere, thus preventing a hazardous pressure build up in the cylinder.
- C. **Pressure Gauge.** The pressure gauge (8, figure 1) is installed in the high pressure portion of the regulator. It indicates the pressure of the oxygen in the high pressure cylinder, thus giving an indication of the amount of available oxygen.
- D. **Pressure regulator.** Pressure regulator (see figure 4) reduces high pressure oxygen to a lower pressure. When the "ON-OFF" valve is open, oxygen flows to the pressure reducing mechanism. It performs in the following manner. High pressure oxygen and spring (9) act upward on thrust pin (10). These forces act to seat the pin against valve seat (11) to prevent flow out of the regulator. The other end of the pin rests against thrust plate (12) and diaphragm (13). One side of the diaphragm is acted upon by spring (14) and the other side is acted upon by outlet pressure. The spring acts downward and tends to move thrust pin (10) away from seat (11). Outlet oxygen pressure acts upward on the diaphragm to counter the spring pressure. Oxygen will flow through the regulator as long as the force of spring (14) exceeds the outlet pressure and forces tending to move thrust pin (10) against its seat. However, an increase in outlet pressure counter-balances spring (14), and thrust pin (10) is forced toward its seat by inlet oxygen pressure and spring (9) until a condition of equilibrium is established and regulator pressure is maintained. Spring (14) is preset to maintain an outlet pressure of approximately 55 psi (0.38 MPa).
- E. **Charging valve assembly.** Charging valve assembly (see figure 5) is used to fill the oxygen cylinder with high pressure oxygen. Since it is located in the upper portion of the regulator, the "ON-OFF" valve must be open to allow oxygen to flow into the cylinder. High pressure oxygen applied at charging valve inlet (1) forces valve (2) away from its seat, and oxygen flows through porting into the high pressure cylinder. The valve seats against its housing to prevent flow out of the cylinder. A cap installed on the charging valve prevents seepage past valve (2).

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



Charging Valve Assembly
Figure 5

F. Relief Valve. Relief valve (see figure 6) is installed in the low pressure portion of the regulator. The relief valve serves as a safety device to prevent excessive outlet pressure build-up. In the event of excessive outlet pressure poppet assembly (1) is forced away from its seat in body (2), and oxygen is vented through the openings in the body. When pressure drops to an acceptable value, spring (3) forces the poppet against its seat, thus stopping the flow of oxygen.

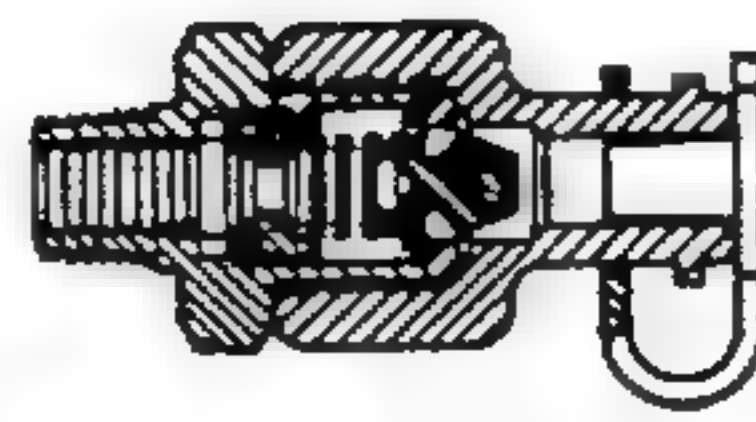


Relief Valve
Figure 6

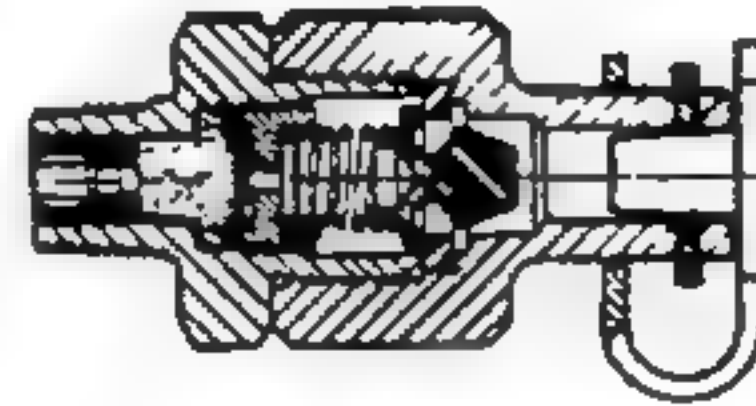
5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- G. Outlet Assemblies. Different outlet assemblies are available. The type used on a particular installation is dependent on the type of mask insert to be used. Each outlet is similar in that it contains an internal check valve and an oxygen hose plug-in adapter. Part number 8572, 10003566, 36728-01 and 800503-00 are unrestricted flow outlets. All other outlets contain glass cord for metering flow. When a plug-in is inserted in an outlet, it opens the check valve and allows flow into a mask.
- H. Two outlet assemblies are provided on most 5500 series assemblies although one and three outlets may also be found. The 5600 series may contain one or two outlet assemblies. Different outlet assemblies are illustrated in figure 7.
- I. Demand Regulator (See figure 8.) The 5600 series contains a demand type regulator. The inlet of the regulator is connected to one of the pressure reducer outlet openings. The demand regulator allows oxygen to flow, on demand, to a demand type mask. Inhalation in the demand mask withdraws oxygen from the body of the demand regulator. This causes a pressure drop in the regulator case which allows atmospheric pressure, acting on the outside of diaphragm (1), to force the diaphragm inward against the stem of valve (2). This action opens the valve and causes oxygen to enter the regulator body, thus raising the pressure in the regulator body. The increased pressure moves the diaphragm away from the valve stem, thus stopping the flow of oxygen. The regulator functions in this manner to supply oxygen on demand.
- J. Pressure Demand Regulator. (See figure 8.) This unit is similar to the demand regulator described in step 9 except that the cover has a slide lever to select demand or pressure-demand modes. In the pressure-demand mode the diaphragm is slightly loaded with a spring. This causes the regulator to build up a positive pressure before shut-off. Masks used with this regulator must have compensated exhalation valves.

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

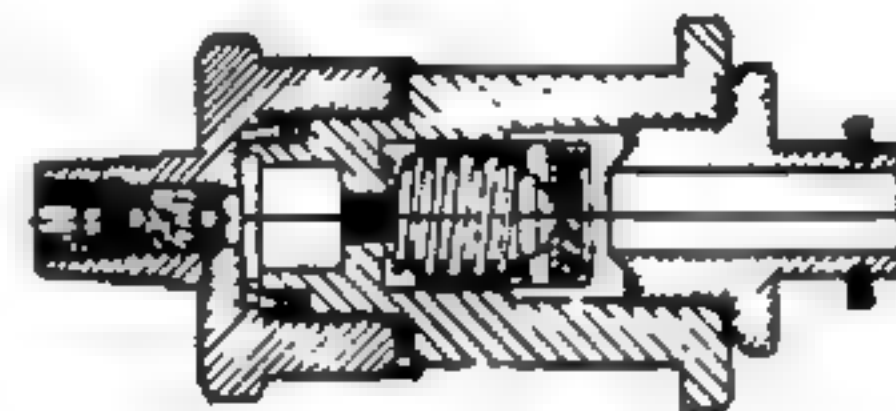


800503-00 Outlet Assembly

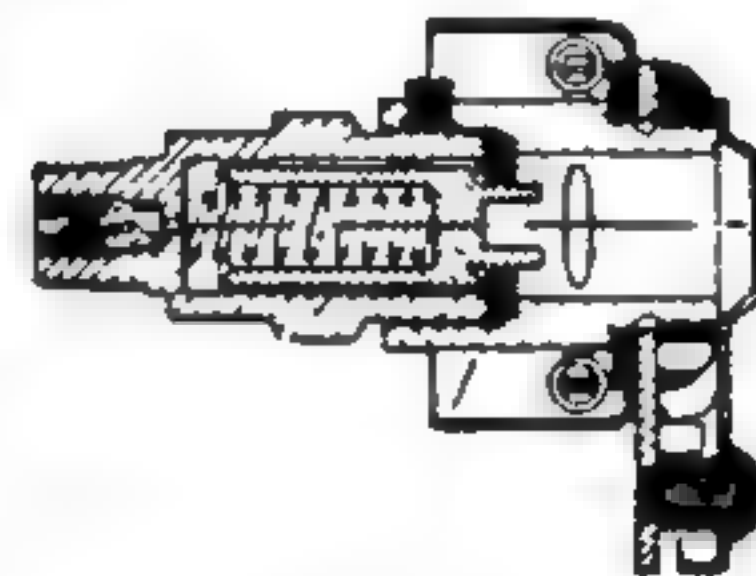


AN Type Plug-In

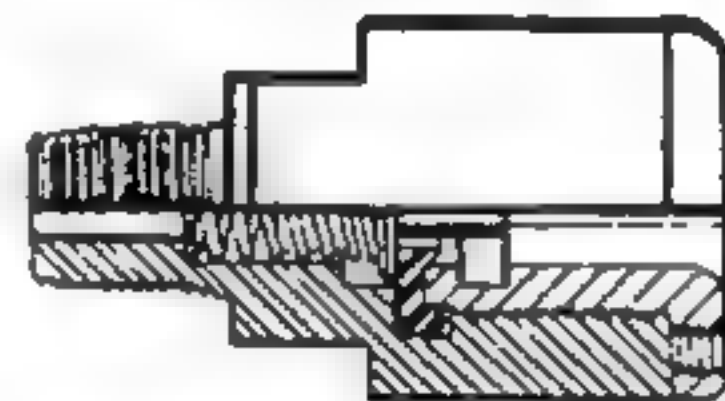
5009 Outlet Assembly



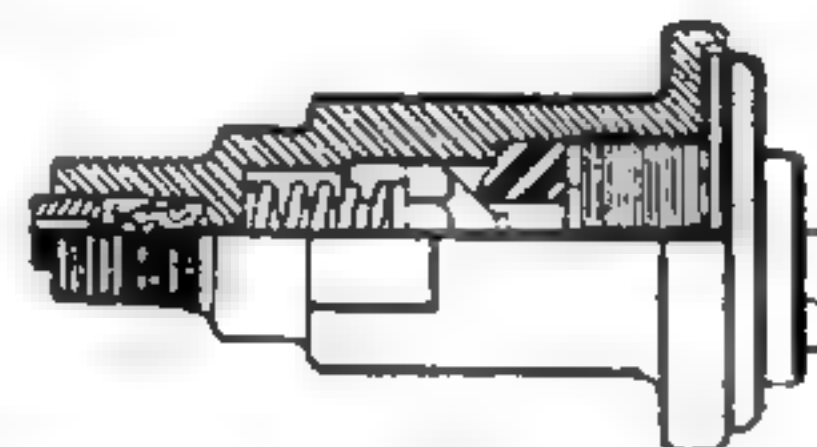
5052 Outlet Assembly
Showing Ohio-Chemical
Type Plug-In



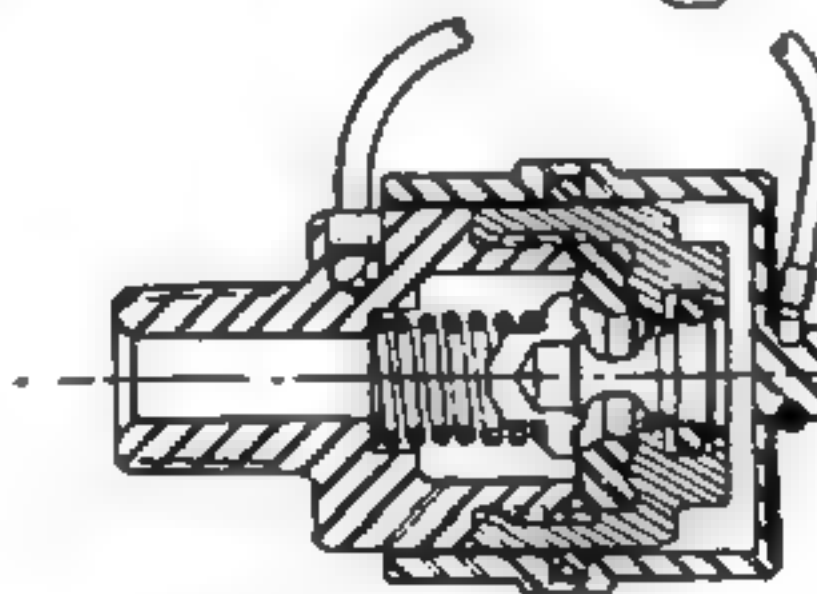
5041 Outlet Assembly
Showing ARO Type
Plug-In



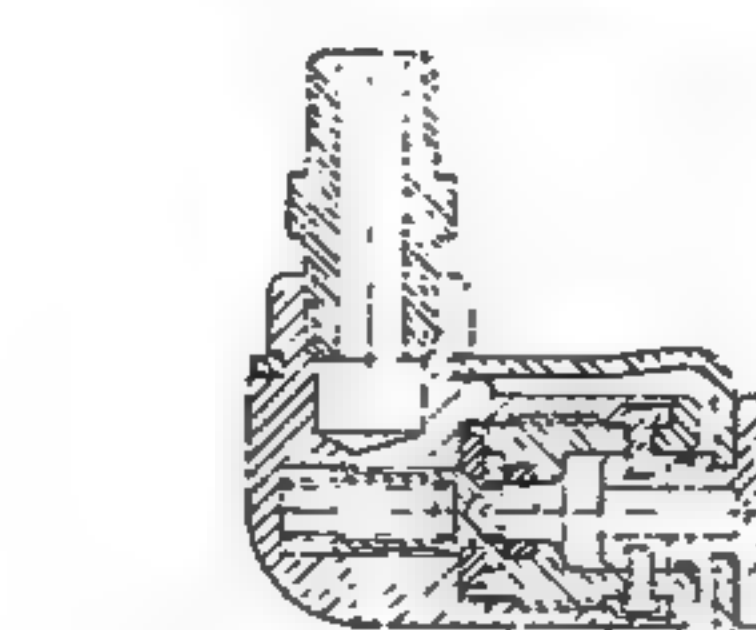
Scott Plug-In



8572 Outlet Assembly

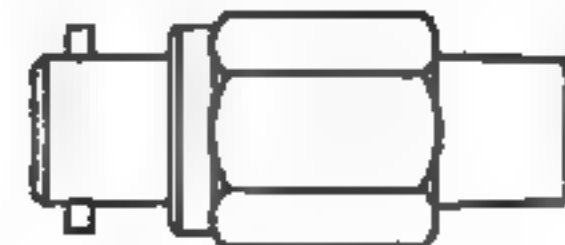


5507 Outlet Assembly



Puritan Type Plug-In

Puritan Type Outlet
10003566



36728-01 EROS Plug-In

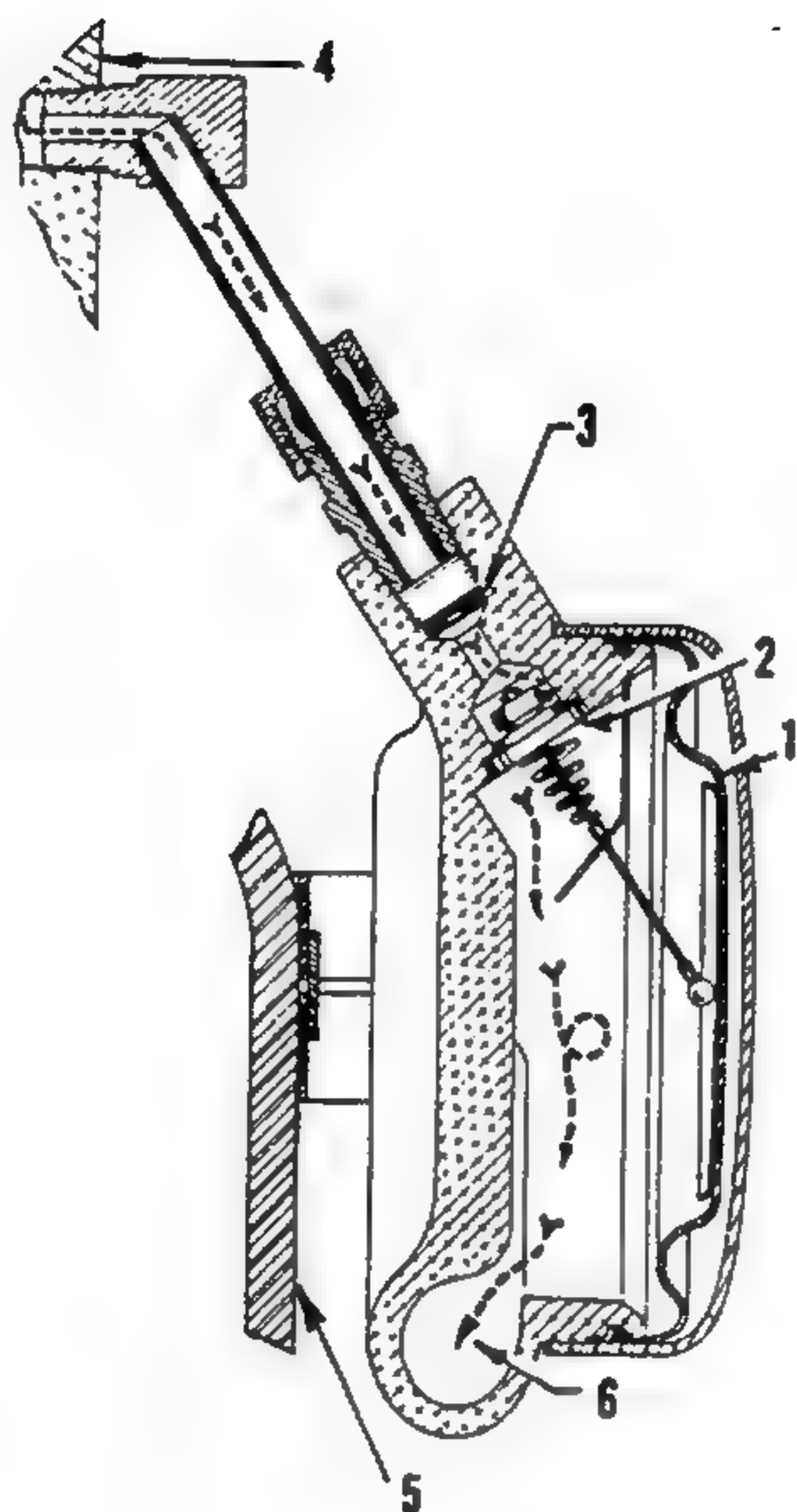
Cessna Type Outlet
802836-01

Available Outlet Assemblies with Plug-Ins
Figure 7

35-30-78

Page 10
Jan 25/83

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



- 1. DIAPHRAGM
- 2. DEMAND VALVE
- 3. FILTER
- 4. REGULATOR
- 5. CYLINDER
- 6. OUTLET PORT TO
DEMAND MASK

Demand Regulator
Figure 8



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

TESTING AND FAULT ISOLATION

1. Testing

WARNING: IN ALL PROCEDURES LISTED BELOW, OXYGEN IS SPECIFIED AS THE TEST GAS. WATER PUMPED NITROGEN OR OIL-FREE AIR MAY BE SUBSTITUTED, BUT RESULTS MUST BE CONVERTED PRIOR TO BEING COMPARED WITH THE RESULTS SPECIFIED FOR OXYGEN. DO NOT, UNDER ANY CIRCUMSTANCES, USE OIL PUMPED GAS AS THIS WILL CAUSE CONTAMINATION OF THE REGULATOR AND TEST EQUIPMENT. OIL, EVEN IN MINUTE QUANTITY, COMING IN CONTACT WITH OXYGEN MAY CAUSE AN EXPLOSION OR FIRE.

NOTE: Table 101 lists the consumable materials necessary for testing. Equalvent materials may be used.

MATERIAL	DESCRIPTION	MANUFACTURER*	REFER TO TESTING PARAGRAPH
Leak Test Solution	Snoop (MIL-L-25567)	V18034	1.C.(2) 1.F.(12) 1.C.(5) 1.G.(2) 1.C.(6)
Oxygen	MIL-O-27210, Type I	V07098	ALL

*Refer to Illustrated Parts List, paragraph 1.E for Vendor's Code

List of Consumable Materials for Testing
Table 101

NOTE: The equipment required to perform testing procedures are listed on each of the figures in this section. With the exception of equipment listed with Scott part numbers, all test equipment is considered to be "standard" in oxygen repair shops. Equivalent equipment may be used.

A. All tests shall be conducted with a cylinder pressure of 1800 +50, -0 psi (12.41 + 0.34, -0 MPa). Fully charge the cylinder to 1800 +50, -0 psi (12.41 + 0.34, -0 MPa) in accordance with the following instructions.

(1) Check the pressure shown on the pressure gauge. If it indicates less than 1800 +50, -0 psi (12.41 + 0.34, -0 MPa), the cylinder shall be charged.

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- (2) Use an oxygen charging system as shown in figure 101.
- (3) Open the "ON-OFF" valve fully, and remove the cap from the charging valve.
- (4) Connect the supply cylinder set up (see figure 101) to the charging valve.
- (5) Slowly open the supply cylinder valve, charging at a rate not to exceed 300 psi (2.07 MPa) per minute. Compare the indications of the gauge on the unit and the gauge of the supply cylinders. When the pressure in the breathing oxygen cylinder equals the supply cylinder pressure, close the supply cylinder valve. Allow the cylinder to cool, and recheck the pressure shown on the pressure gauge. The cylinder shall contain 1800 +50, -0 psi (12.41 + 0.34, -0 MPa) at not over 70°F (21.1°C).

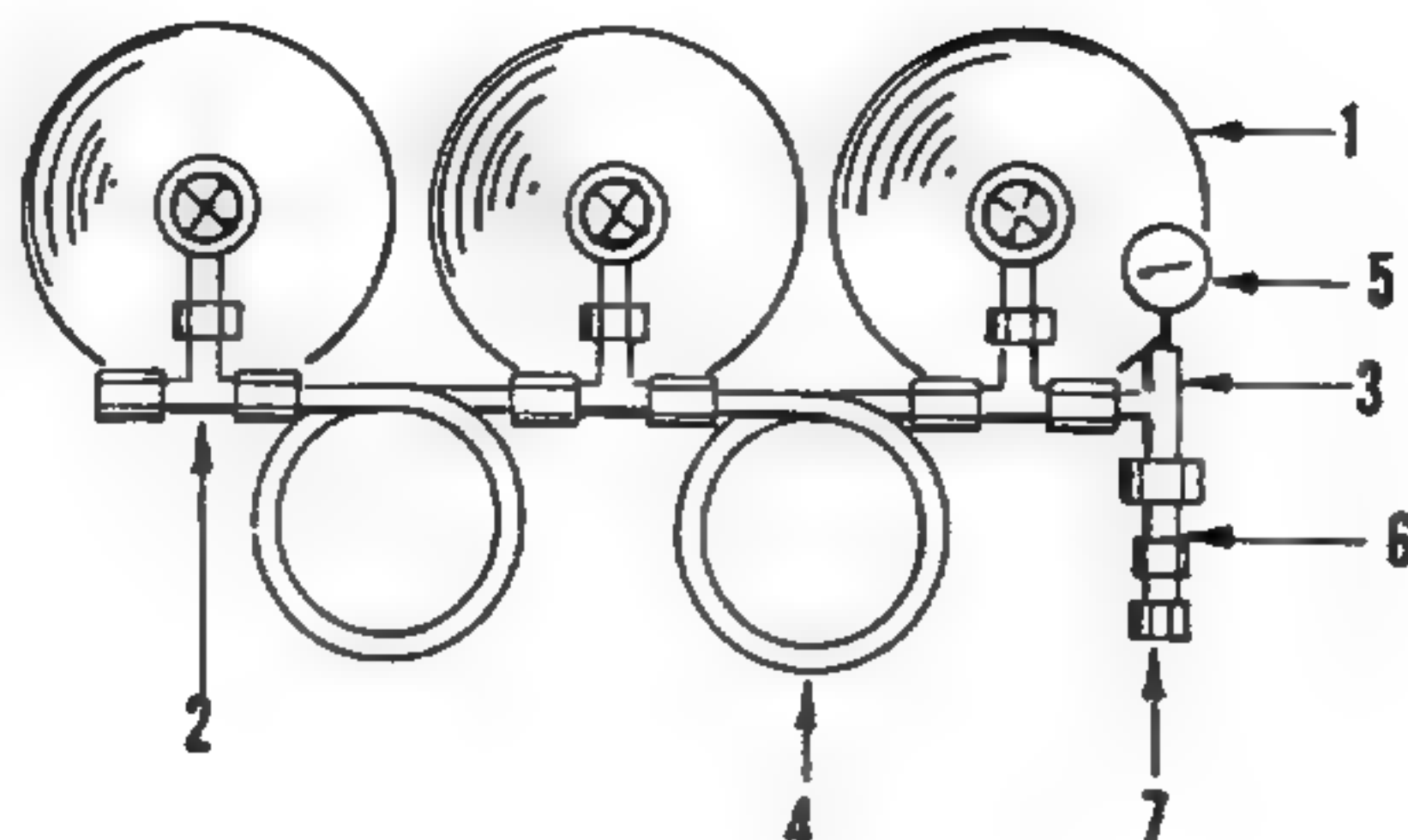
B. Relief Valve

- (1) Connect the relief valve to a suitable oxygen pressure source.
- (2) Apply 90 psi (0.62 MPa) to the relief valve. Valve must hold 90 psi (0.62 MPa).
- (3) Increase pressure to 135 psi (0.93 MPa). Relief valve must flow fully.
- (4) Reduce pressure to 90 psi (0.62 MPa). Valve must reseal.

C. Outlet Assemblies

- (1) Connect the appropriate outlet assembly to a suitable oxygen pressure source.
- (2) Apply 55 ± 2 psi (0.38 ± 0.01 MPa) to the outlet assembly and apply leak test solution to all body joints and the outlet port. Bubbles indicate leaks which must be corrected.
- (3) Insert the appropriate mask plug-in into the outlet. The plug-in must be securely held and allow oxygen to flow.

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



- | | |
|--|------------------------------|
| 1. SUPPLY CYLINDERS | 6. REFILL COUPLING, P/N 5020 |
| 2. TEE, P/N 6258 | 7. CONNECT CHARGING VALVE OF |
| 3. TEE, P/N 6145 | PORTABLE BREATHING UNIT TO |
| 4. PIGTAIL, P/N 5082 | REFILL COUPLING |
| 5. OXYGEN GAUGE 0-2000 PSI (0 - 13.79 MPa) | |

Setup for Recharging Portable Breathing Unit
Figure 101

- (4) Shut off the oxygen supply to the outlet assembly. Connect a suitable flowmeter to the mask plug-in. Apply an inlet pressure of 55 ± 2 psi (0.38 ± 0.01 MPa). The flow for a particular outlet is determined by the coding of the 5500 or 5600 part numbers (see figure 2 and 3) of which the outlet is a part. This code is also stamped on the hexagonal base of each outlet. When flow settings differ on outlets of one 5500 or 5600 unit, "LO" flow and "HI" flow are indicated on the appropriate outlet assemblies. At ground level, outlet flows must agree with the values listed in figure 102 for the particular flow and altitude markings. If flows do not agree, adjust the outlet assembly in accordance with the following instructions.
- (5) Check for external leakage at the joint of the outlet and the mask plug-in using leak test solution. No leakage is allowed.

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

- (6) Remove the plug-in and check for leakage at the outlet port using leak test solution. No leakage is allowed.

NOTE: Outlet assemblies, part numbers 10003566, 8572, 36728-01 and 800503-00 are unrestricted flow outlets and do not contain glass cord packing.

- (a) Remove the oxygen supply from the outlet assembly.
- (b) Flow adjustment is accomplished by compressing the glass cord. This is done by threading the adjusting screw into the outlet. This action serves to decrease flow. Adjust and test outlets until desired flow is obtained.

ALTITUDE FLOW LITERS/MINUTE (STPD) (760 mm Hg, 0°C)	ALTITUDE - FEET X 1000					
	5	10	15	20	25	30
	REQUIRED GROUND LEVEL					
	FLOW SETTING IN LITERS/MINUTES (NTPD) (760 mm Hg, 21°C) PERMISSIBLE TOLERANCE +5%					
0.5	0.74	0.86	0.91	0.96	1.00	1.08
0.7	0.96	1.10	1.15	1.20	1.24	1.32
2.0	2.51	2.65	2.72	2.80	2.84	2.89
2.5	3.07	3.21	3.30	3.40	3.44	3.47
2.7	3.37	3.48	3.58	3.65	3.72	3.78
3.0	3.72	3.85	3.97	4.08	4.14	4.22
4.0	4.83	4.98	5.10	5.21	5.30	5.38
4.5	5.31	5.48	5.65	5.80	5.90	6.00
7.0	8.40	8.52	8.71	8.81	8.91	9.02
8.0	9.58	9.71	9.92	10.02	10.12	10.25
NOTE: Interpolate given values to obtain flow settings for altitudes between given altitudes.						

Outlet Assembly Setting
Figure 102

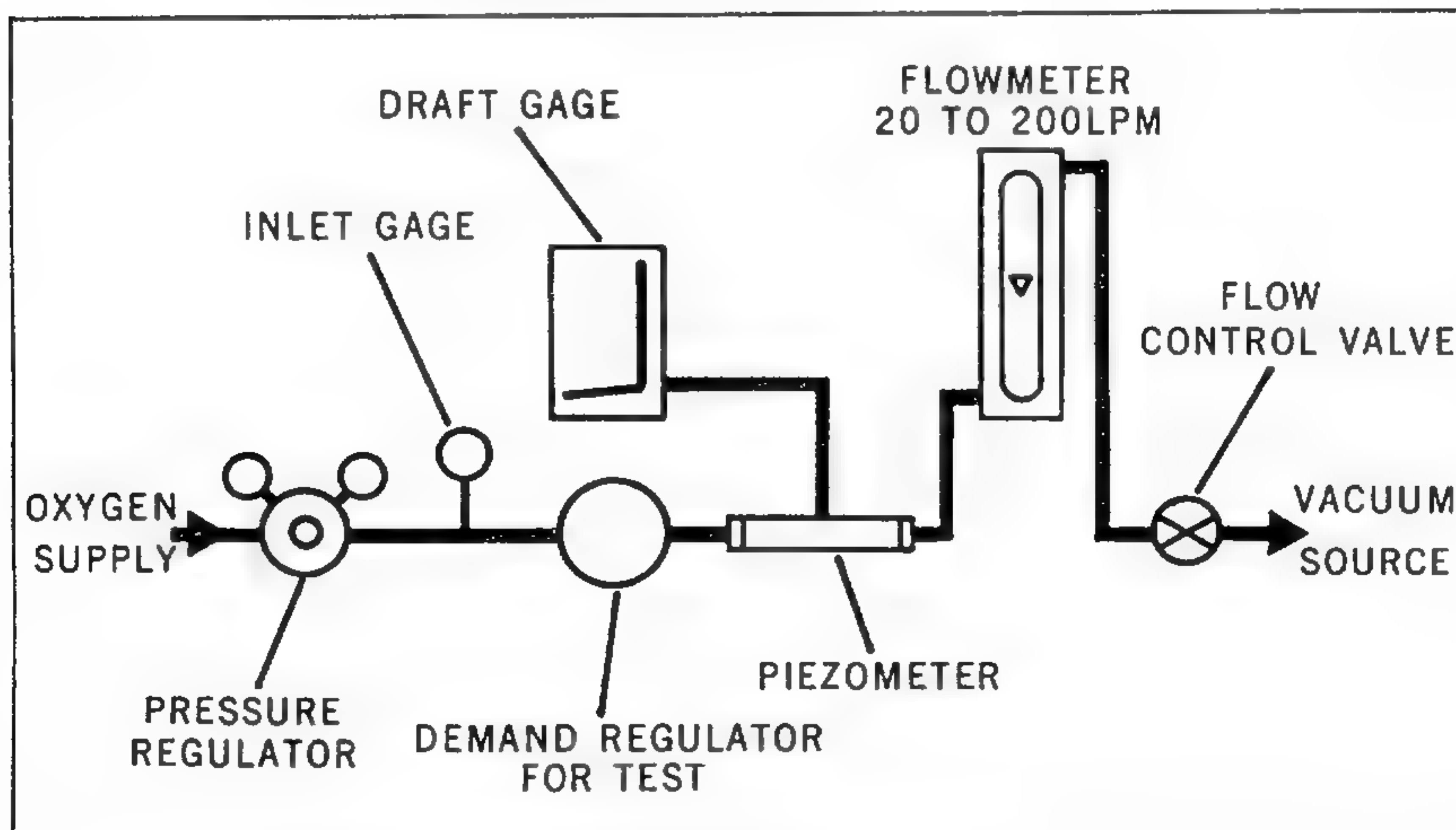
5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

NOTE: Since glass cord will not expand once compressed, removal of adjusting screw will not alter flow. Adjustment should be done with care. The only method for increasing flow is to remove the compressed glass cord and repack the outlet assembly.

D. 6379-2 Series Demand Regulator Test. (See figure 103.)

- (1) Connect an assembled regulator to the test setup shown in figure 103.
- (2) With inlet pressure of 35 psi (0.24 MPa), adjust flow control valve for a minimum flow of 20 liters per minute. Resistance, indicated on draft gauge, shall not be greater than 0.7 inches (17.78 mm) of water.
- (3) With inlet pressure of 85 psi (0.59 MPa), adjust flow control valve for a minimum flow of 125 liters per minute. Resistance, indicated on draft gauge, shall not be greater than 2.0 inches (50.8 mm) of water.

NOTE: The regulated inlet pressure must be maintained during test.



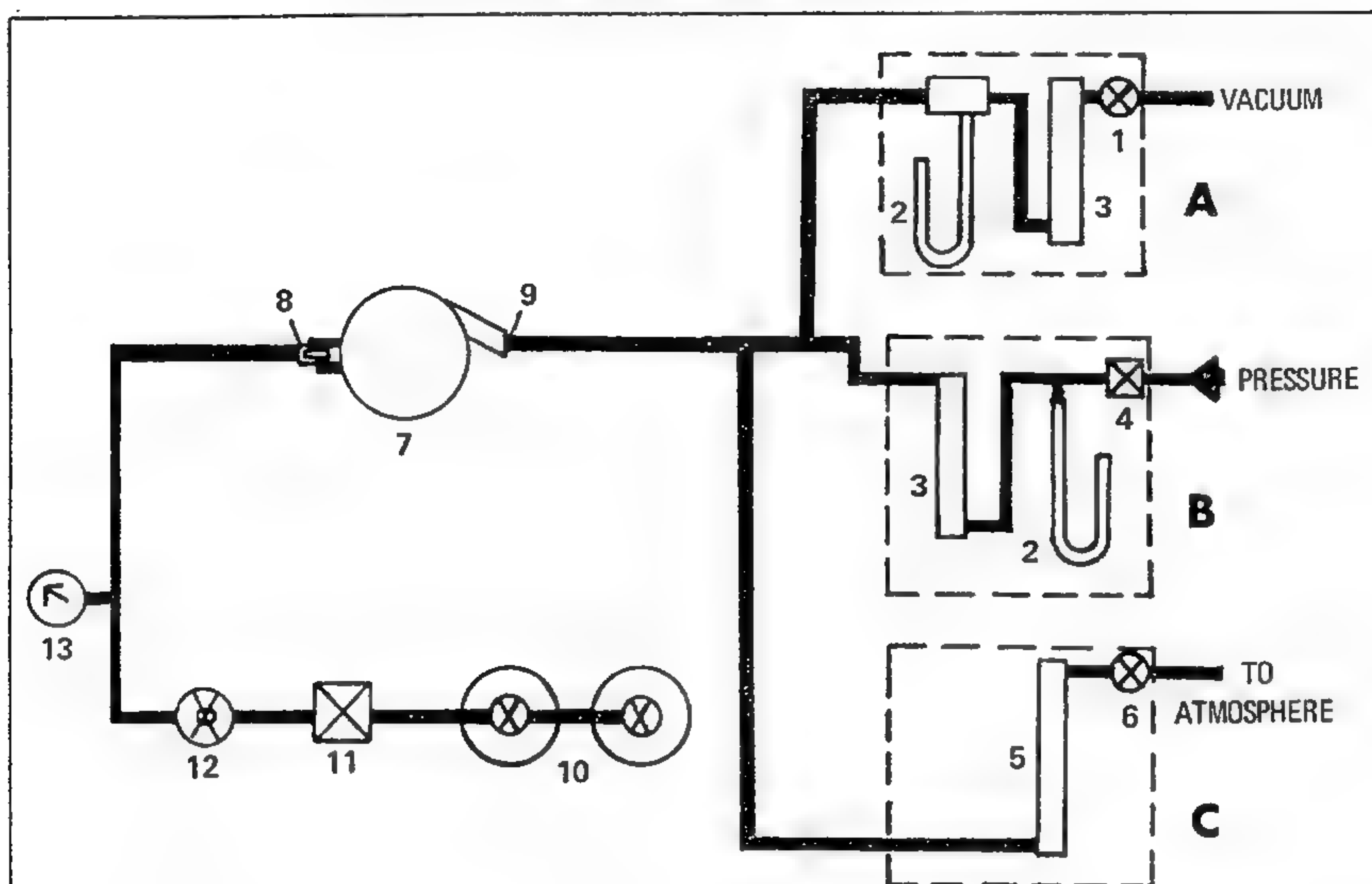
Test Setup for Demand Regulator P/N 6379
Figure 103

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

E. 800649 Pressure/Demand Regulator Tests

- (1) Proof Pressure Test
 - (a) With the selector switch in the "DEMAND" position, apply 125 psi (0.86 MPa) to the inlet port and hold for two minutes. Relieve the pressure. There shall be no evidence of damage, deterioration, or permanent set. Acceptable performance of the unit in the following tests will indicate conformance to this requirement.
- (2) Overpressure Test (See figure 104, Parts A and B)
 - (a) Seal the regulator assembly inlet port, keeping the selector switch in the "DEMAND" position.
 - (b) Apply a negative (vacuum) pressure of 29 inches (736.6 mm) H₂O to the outlet port for two minutes per Part A, then relieve the pressure.
 - (c) Apply a positive pressure of 24 inches (609.6 mm) H₂O to the outlet port for two minutes per Part B, then relieve the pressure.
 - (d) Carefully remove the regulator cover and inspect for integrity of the diaphragm tie cord and for damage (bending) of the diaphragm plate.
 - (e) Replace the regulator cover and proceed with the following tests.
- (3) Inward Leakage (See figure 104, Part A)
 - (a) Seal the regulator assembly inlet port, keeping the selector switch in the "DEMAND" position.
 - (b) Apply a negative (vacuum) pressure of 1 inch (25.4 mm) H₂O as indicated on manometer (2) to the outlet port.
 - (c) Leakage, as measured on flowmeter (3), shall not exceed 100 cc/min.
- (4) Outward Leakage (See figure 104, Part B)
 - (a) Seal the regulator assembly inlet port, keeping the selector switch in the "DEMAND" position.
 - (b) Apply a positive pressure of 12 inches (304.8 mm) H₂O as indicated on manometer (2) to the outlet port.
 - (c) Leakage, as indicated on flowmeter (3), shall not exceed 100 cc/min.

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



- | | |
|--|---------------------------------------|
| 1. NEEDLE VALVE | 8. REGULATOR INLET |
| 2. MANOMETER (0-30 in.) (0-762 mm)
H ₂ O | 9. REGULATOR OUTLET |
| 3. FLOWMETER (0-150 cc/min.)
(0-100 LPM) | 10. OXYGEN SOURCE |
| 4. PRESSURE REGULATOR | 11. PRESSURE REDUCER |
| 5. FLOWMETER (0-15 cc/min.) | 12. SLOW OPENING VALVE |
| 6. CONTROL VALVE | 13. GAUGE (0-200 psi)
(0-1.38 MPa) |
| 7. 800649 REGULATOR UNDER TEST | |

- A. Setup for Overpressure Test (Para. 1.E. (2)) and Inward Leakage Test (Para. 1.E. (3)).
- B. Setup for Outward Leakage Test (Para. 1.E. (4)).
- C. Setup for Outlet (Valve Seat) Leakage (Para. 1.E. (5)).

Flow, Leakage and Pressure Tests Setups
Figure 104

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- (d) Remove the seal from the regulator assembly inlet.
- (5) Outlet (Valve Seat) Leakage (See figure 104, Part C)
 - (a) With the selector switch in the "DEMAND" position, regulator inlet (8) connected to oxygen source (10) and regulator outlet (9) connected as shown in Part C, open valve (12) until 35 psi (0.24 MPa) is indicated on gauge (13).
 - (b) Open control valve (6); leakage, as indicated on flowmeter (5), shall not exceed 10 cc/min.
 - (c) Increase pressure until 75 psi (0.52 MPa) is indicated on gauge (13).
 - (d) Leakage, as indicated on flowmeter (5), shall not exceed 10 cc/min.
- (6) Flow Tests (See figure 104.)
 - (a) With the selector switch in the "DEMAND" position, regulator inlet (8) connected to oxygen source (10) and regulator outlet (9) connected as shown in Part A, open valve (12) until 35 psi (0.24 MPa) is indicated on gauge (13).
 - (b) Slowly open needle valve (1) until 20 LPM is indicated on flowmeter (3). Manometer (2) shall indicate a maximum of -0.75 inches (-19.06 mm) H₂O.
 - (c) Continue to open needle valve (1) until 70 LPM is indicated on flowmeter (3). Manometer (2) shall indicate a maximum of -1.55 inches (-39.37 mm) H₂O.
 - (d) Open needle valve (1) until 100 LPM is indicated on flowmeter (3). Manometer (2) shall indicate a maximum of -2.00 inches (-50.8 mm) H₂O. Shut off oxygen supply at valve (12).
 - (e) Place selector switch in the "PRESSURE DEMAND" position with the regulator still connected as in step (a) above.
 - (f) Slowly open needle valve until 20 LPM is indicated on flowmeter (3). Manometer (2) shall indicate between +0.5 and +2.0 inches (+12.7 and +50.8 mm) H₂O.
 - (g) Open needle valve until 100 LPM is indicated on flowmeter (3). Manometer (2) shall indicate between +0.5 and +2.0 inches (+12.7 and +50.8 mm) H₂O.

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- (h) Slowly close needle valve until 10 cc/min is indicated on flowmeter (3). Manometer (2) shall indicate between +0.5 and +2.5 inches (+12.7 and +63.5 mm) H₂O.
- (i) Shut off the supply at slow opening valve (12) and disconnect regulator (7) from the test setup.

F. 5510 Series Regulator Adjustment and Test.

NOTE: Before testing the regulator assembly, make sure it is completely assembled with tested components.

- (1) Remove relief valve from regulator and install a 0-100 psig (0.69 MPa) pressure gauge in its place.
- (2) Turn the regulator on-off valve to the "ON" position then turn the valve to the "OFF" position.
- (3) Vent the upper section of the regulator by engaging a mask plug-in into an outlet and letting the oxygen vent. If no constant flow outlet is used on the regulator, attach a threaded adapter and needle valve to one of the plugged outlet ports. Vent through the needle valve.
- (4) Repeat steps (2) and (3) a total of ten times.
- (5) Adjust the regulator outlet pressure by turning screw (35, IPL figure 9) as necessary to obtain 55 ± 2 psi (0.38 ± 0.01 MPa) pressure as indicated on the gauge attached to the regulator relief valve port. Regulator must be flowing through an outlet while the pressure is being adjusted. If no outlet is being used, use an adapter and needle valve (cleaned for oxygen service) and flow approximately 4 LPM.
- (6) Connect a 10 liter per minute flow meter to a suitable mask plug-in and turn the on-off valve to the "ON" position, then connect the mask plug-in to an outlet. Flow, as indicated on the attached flowmeter, must be in accordance with figure 102.
- (7) Remove the mask plug-in and check the regulator outlet pressure. Lock-up pressure shall not exceed 75 psi (0.52 MPa).

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- (9) Turn the regulator on-off valve to the "OFF" position and replace the 0-100 psi (0-0.69 MPa) pressure gauge with the regulator valve.
- (10) Repeat steps (1) through (9) a total of three times at 24 hour intervals. Then torque the relief valve per Table 801.

NOTE: The 24-hour time interval is recommended to permit component parts to settle.

- (11) Turn the regulator on-off valve to the "ON" position.
- (12) Use leak test solution to leak test all regulator joints and outlet ports. Manipulate mask plug-in to simulate use during test. No leakage is allowed. If outlets, gauge or relief valve joints leak, retorque until leak is eliminated. Maximum torque must not exceed values listed in Table 801. If charging valve assembly leaks, retorque until leak is eliminated. Maximum torque must not exceed value listed in Table 801.

NOTE: Always relieve pressure when retorquing fittings.

G. Final Test of Complete Unit.

- (1) Turn the regulator on-off valve to the "ON" position.
- (2) Use leak test solution to leak test all regulator joints, connections and outlet ports. Check On-Off valve stem area for leakage while turning valve from fully "ON" to "OFF" position and from fully "OFF" back to "ON" position. Manipulate mask plug-in to simulate use during test. No leakage is allowed.
- (3) Perform a functional test of the unit by connecting a mask to each of the outlets to assure flow of oxygen. If the unit is a 5600, connect a mask to the demand regulator and don the mask and breathe to assure regulator operation.

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

2. Fault Isolation

A. See figure 105 for a chart containing troubles, probable causes and remedies.

TROUBLE	PROBABLE CAUSE	REMEDY
A. Leakage		
(1) Leakage at joint between outlet assembly (26, IPL figure 2), relief valve (32, IPL figure 9), or gauge (31 or 31A) and body (49)	(a) Units not assembled to body using sealing tape (b) Units not tight enough in body	Reassembly to body per Assembly, paragraph 2.B, 2.E or 2.F Retorque per Table 801
(2) Leakage at joint between charging valve assembly (24) body and body (49)	(a) Unit not assembled to body using sealing tape (b) Unit not tight enough in body	Reassemble to body per Assembly, paragraph 2.C Retorque per Table 801
(3) Leakage at joint between safety plug (28) and body (49)	(a) Unit not tight enough in body (b) Defective disc (29, IPL figure 9) or washer (30)	Retorque per Table 801 Inspect periphery of washer and disc for smoothness. Replace if necessary and re-torque per Table 801
(4) Leakage past core of charging valve assembly (24)	(a) Loose or defective core	Replace charging valve assembly
(5) Leakage at joint between bushing (19) and body (49)	(a) Unit not tight enough in body (b) Defective packing (18)	Retorque per Table 801 Replace packing

Trouble Shooting Chart
Figure 105 (Sheet 1 of 4)

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

TROUBLE	PROBABLE CAUSE	REMEDY
A. Leakage (Cont'd)		
(6) Leakage between bushing (19, IPL figure 9) and nut (13)	(a) Loose nut (13, IPL figure 9) (b) Defective packing (14)	Tighten nut Replace packing per Assembly, paragraph 2.K
(7) Leakage between stem assembly (15) and nut (13)	(a) Faulty seat (16) (b) Contamination	Replace seat Clean seal
(8) Demand regulator (7, IPL figure 2) leaks	(a) Contamination on gasket (24, IPL figure 3) (b) Defective demand valve assembly (20) or gasket (24)	Disassemble demand valve assembly and clean Replace demand valve assembly and/or gasket
B. Relief Pressure		
(1) Relief valve (32, IPL, figure 9) does not relieve at proper pressure	(a) Worn parts or contamination	Replace relief valve
C. Oxygen Shut Off		
(1) On-Off valve fails to shut off oxygen in "OFF" position	(a) Faulty head assembly (17 or 17A, IPL figure 9)	Replace head assembly per Assembly, paragraph 2.I

Trouble Shooting Chart
Figure 105 (Sheet 2 of 4)

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

TROUBLE	PROBABLE CAUSE	REMEDY
D. Outlet Pressure		
(1) Regulator assembly (38, IPL figure 2) fails to provide proper outlet pressure	(a) Regulator assembly not adjusted properly	Readjust regulator assembly per Testing, paragraph 1.F
(2) Regulator assembly (38) fails to hold proper outlet pressure	(a) Defective seat (44 or 44A, IPL figure 9) or pin (45)	Inspect seat and pin per Assembly, paragraph 2.0
	(b) Diaphragm (41) defective	Replace diaphragm
	(c) Diaphragm not sealed to body	Reassemble diaphragm per Assembly, paragraph 2.Q
E. Draft and Flow Requirements		
(1) Outlet assembly (28, IPL figure 2) does not allow proper flow	(a) Worn parts	Inspect parts; replace as necessary
(2) Demand regulator (7, IPL figure 2) fails to meet draft and flow requirements	(b) Parts not properly assembled	Disassemble parts and reassemble properly per Assembly, paragraph 1
	(a) Demand valve assembly (20, IPL figure 3) sticking	Replace demand valve assembly
	(b) Diaphragm (10) punctured	Install new diaphragm per assembly, paragraph 3.E
	(c) Diaphragm (10) not properly assembled to case (28)	Reinstall diaphragm per Assembly, paragraph 3.E

Trouble Shooting chart
Figure 105 (Sheet 3 of 4)

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

TROUBLE	PROBABLE CAUSE	REMEDY
F. Plug-In Retention		
(1) Outlet assembly (28, IPL figure 2) does not hold plug-in securely	(a) Worn parts (b) Parts improperly assembled	Inspect parts; replace as necessary Disassemble outlet and reassemble properly per Assembly, paragraph 1

Trouble Shooting Chart
Figure 105 (Sheet 4 of 4)



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

DISASSEMBLY

WARNING: THE OXYGEN CYLINDER SHALL BE COMPLETELY DISCHARGED PRIOR TO PERFORMING ANY DISASSEMBLY.

NOTE: The instructions in paragraphs 1 and 2 list the steps necessary to disassemble each of the Portable Oxygen Breathing Assemblies into major components. Instructions for disassembly of the components are listed in paragraphs 3 through 5.

CAUTION: TO PREVENT POSSIBILITY OF THREAD GALLING, THE REGULATOR BODY SHOULD NOT BE REMOVED FROM THE CYLINDER UNLESS THE CYLINDER IS DUE FOR HYDROSTATIC RETESTING, OR CYLINDER CONTAMINATION IS SUSPECTED.

NOTE: See Testing and Fault Isolation, to establish the condition of the unit or most probable cause of its malfunction. This is to determine the extent of disassembly required without completely tearing down and rebuilding the unit.

1. 5500 Series. (See IPL figure 2.)

- A. Do not attempt to remove regulator (38) from cylinder (60) until all external components have been removed from the regulator.
- B. Identification plate (35) is attached to regulator (38) with drive screws (37). Plates (43, 44 and 44A) are attached by an adhesive. Removal of these plates is not ordinarily required.
- C. Remove clamp (24) and sling (17).
- D. Unscrew and remove outlet assemblies (28).

2. 5600 Series. (See IPL figure 2.)

- A. Remove clamp (24) and sling (17).
- B. Do not attempt to remove regulator (38) from cylinder (60) until all components have been removed from the regulator.
- C. Remove screws (11). Remove clamp (14) to remove bracket (13).
- D. Unthread nut of connector assembly (3). Unthread connector assembly (3) from regulator (7).

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- E. Unthread elbow assembly (4) and outlet assembly (28) from regulator (38).
- F. Identification plate (35) is attached to regulator (38) with two drive screws (37). Instruction plates (43, 44 and 44A) are attached by an adhesive. Removal of these plates is not ordinarily required.

3. 6379 and 800649 Series Demand and Pressure Demand Oxygen Regulators, (See IPL figure 3.)

- A. Remove screws (7), and pull cover assembly (6) or cover (14) off case (28). Removal of plates (8, 11 or 12) is not normally required. If removal is necessary, drill out rivets (10 or 13). Remove plate (9) only if damaged.
- B. Slightly compress spring (13A) and remove from cover (15) and the lever of plate and lever assembly (13B), then remove the plate and lever assembly.
- C. Disconnect and remove spring (13C) from button (13D) then remove the button from cover (15).
- D. Remove cord (17) and take diaphragm assembly (16) off case (28).
- E. Unthread screws (19), and remove deflector (18).
- F. Remove screws (21) and washers (22 and 23). Pull valve assembly (20) out of case (28). Remove gasket (24).
- G. Remove screen (27) from the inlet port of case (28) only if necessary.
- H. Unscrew adapter (25 or 26) from the outlet port of case (28).
- I. If bracket on case (28) appears damaged, drill out attaching rivets. Do not remove the bracket if it is undamaged.

4. Outlet Assemblies.

- A. Part No. 5041. (See IPL figure 4.) Unthread screw (6). Remove screen (7), and pick glass cord (8) out of body (12). Remove screen (9), if necessary. Unscrew nut (3), and remove cover (2). Slide cap (4) and washer (5) off case (18). Remove screw (11). Unthread body (12) from case (18). Take spring (13), valve (14), and seat (15) out of case (18). Remove latch springs (16) and pins (17).

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- B. Part No. 5009. (See IPL figure 5.) Remove cover (3). Remove screw (4), screen (5) and pick glass cord (6) out of stud (8). Unthread stud (8) from receptacle (19). Remove valve (11), spring (13), and gasket (10). Thread flow port (14) out of stud (8). Remove gasket (18). Snap ring (16) out of flow port (14) and remove filter (17).
- C. Part No. 800503-00. (See IPL figure 5.) Remove cover (3). Unscrew stud (8) from receptacle (19). Remove valve (11), spring (13) and gasket (10). Thread flow port (15) out of stud (8). Remove gasket (18) from stud (8).
- D. Part No. 5507 and 5533. (See IPL figure 7.) Remove screw (2) and screen (4). Remove glass cord (3) and screen (4) from body (12). Unthread guide assembly (6). Remove washer (7) from guide assembly (6). Remove washers (8 and 9), seat (10), and spring (11) from body (12).
- E. Part No. 5052. (See IPL figure 8.) Remove screw (2). Remove screen (4), and pick glass cord (3) out of base (7). Take screen (4) and washer (5) out of base (7). Unthread base (7) from body (13). Remove gasket (8). Unthread seat (10). Remove gasket (11). Take retainer (12) and spring (9) out of body (13).
- F. Part No. 8572. (See IPL figure 6.) Unscrew body assembly (2) from adapter (9). Remove gasket (5), poppet (6), spring (7), and filter (8) from adapter (9).
- G. Part No. 802863-02. (See IPL figure 10.) Disassemble as follows:
- (1) Unthread nipple (2) from body (15) only if damaged or leakage has been noted.
 - (2) Push in and turn plug assembly (4 through 6) counterclockwise to remove. Pull cover (4) off plug (6) and body (15) then remove packing (5) from the plug and discard the packing.
 - (3) Unthread sleeve and pin assembly (8 and 9) from body (15). Remove pins (8) from sleeve (9).

NOTE: Use of plug (6) may aid in unthreading the sleeve and pin assembly.

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

- (4) Remove seal (10), retainer (11) and packing (12) from sleeve (9) and discard the seal and packing.
- (5) Remove poppet (13) and spring (14) from body (15).

5. 5510 Series Regulator Assembly. (See IPL figure 9.)

NOTE: The regulator should not be removed from the cylinder for disassembly. Disassembly of the regulator body from the cylinder should not be attempted until completion of the disassembly instructions listed below.

- A. Unthread screws (34) and remove plate (33). Remove screw (35).
- B. Unthread and remove case (36 or 36A). Lift guide (37), spring (38), plate (39), ring (40), diaphragm (41), and plate (42) out of body (49 or 49A).
- C. Unscrew and remove holder (43). Remove seat (44 or 44A), pin (45), guide (46), and spring (47).
- D. Unthread and remove plug (28). Remove disc (29) and washer (30).
- E. Remove on-off valve by unthreading it from the regulator body. Use a wrench on the flats of the hexagonal portion of the valve body. Remove filter (21), if necessary, or plug (20).
- F. Peel plate (7) off handle (8). Remove nut (9) and washer (10). Pull handle (8) off stem assembly (15).
- G. Remove washers (11 and 12).
- H. Unthread nut (13). Remove packing (14 or 14A) and seat (16).
- I. Using stem assembly (15), back head assembly (17 or 17A) out of bushing (19).
- J. Remove packing (18 or 18A).
- K. Unthread relief valve (32) from body (49 or 49A).
- L. Remove the sealing tape compound on threads of relief valve (32).

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

- M. Remove cap (22). Seat (23) is cemented to the cap. Unthread and remove charging valve assembly (24), then remove filters (25 and 27).
- N. Remove gauge (31 or 31A) by using a thin wrench on the flats of the square at the rear of the case.
- O. Removal of regulator body (49 or 49A) from the cylinder is not recommended and is not usually required. If removal is essential, install the unit in a suitable holding fixture and use wrench (1) to remove the regulator body from the cylinder. Remove drain tube (48, IPL figure 9) only if it is damaged.



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

CLEANING

WARNING: DO NOT ALLOW OIL, GREASE, FLAMMABLE SOLVENTS, OR OTHER COMBUSTIBLE MATERIALS TO COME IN CONTACT WITH PARTS THAT WILL BE EXPOSED TO PRESSURIZED OXYGEN. SUCH MATERIALS, AS WELL AS DUST, LINT, AND FINE METAL FILINGS ARE ALL POTENTIAL COMBUSTIBLES WHICH MIGHT, WHEN EXPOSED TO OXYGEN UNDER PRESSURE, IGNITE AND RESULT IN AN EXPLOSION.

1. Using the material listed in Table 401, perform the cleaning procedures outlined in the following paragraphs.

NOTE: Equivalent materials may be used.

MATERIAL	DESCRIPTION	MANUFACTURER*	REFER TO PARAGRAPH
Acid/Odor Neutralizer	Fisan-Enzodent	V44389	1.A.(5)
Phosphoric - Isopropyl Mixture	Phosphoric Acid Isopropyl Alcohol (50% of each by Vol)	V70829 NOTE: Purchased separately	1.A.(3)
1,1,1 Trichloroethane	MIL-T-81533 FED SPEC. O-T-620	V71984	1.A.(4) 1.A.(8) a., b., c. 1.B.(2)
*Refer to Illustrated Parts List, paragraph 1.E for Vendor's Code.			

List of Cleaning Materials
Table 401

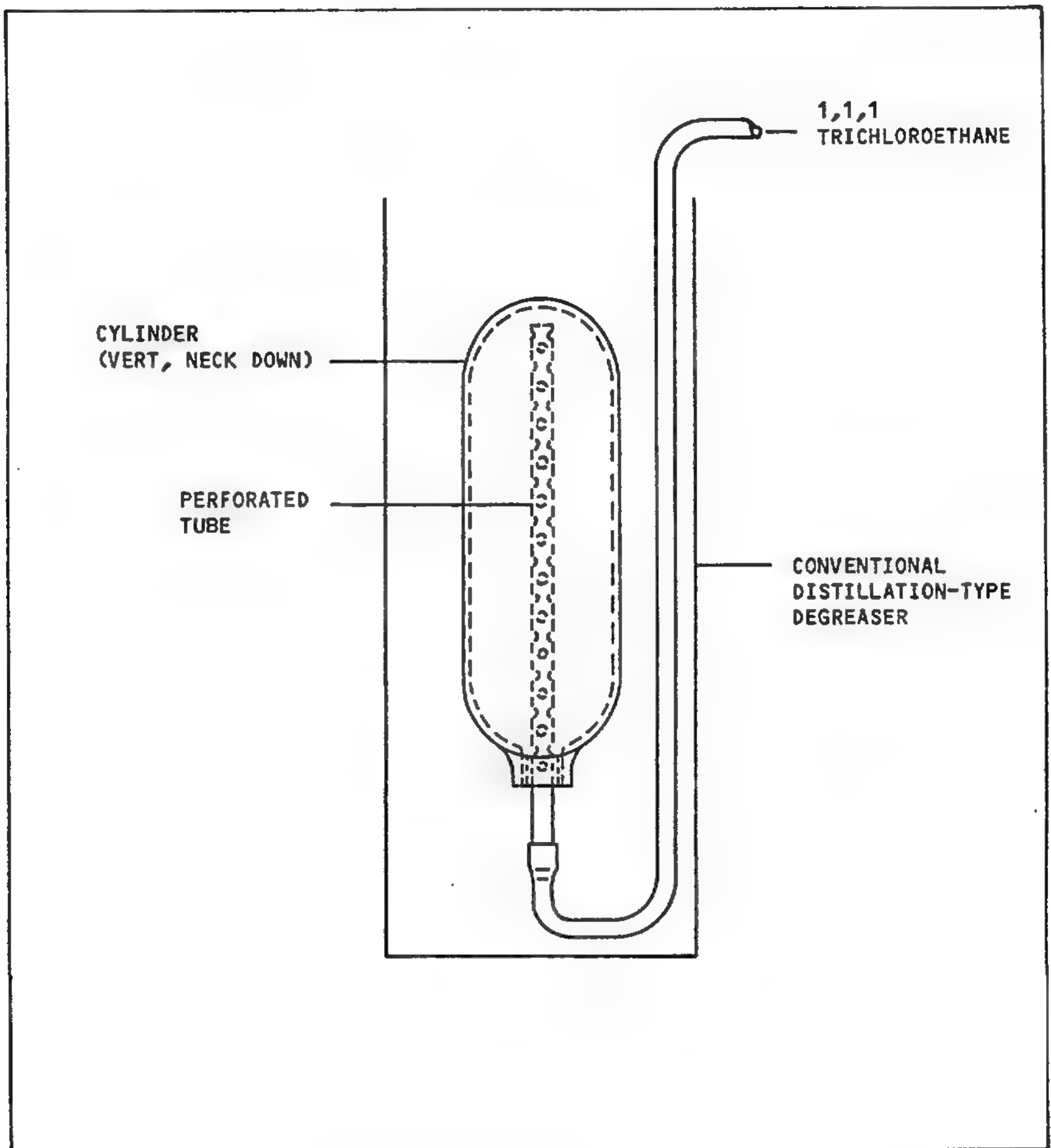
- A. After inspecting cylinder in accordance with Check perform the following cleaning procedure:

NOTE: This procedure will remove any organic impurities which are soluble in 1,1,1 Trichloroethane.

- (1) Wire brush the cylinder neck threads to remove sealing compounds or rust.
- (2) Shake out cylinder to remove any loose foreign matter.
- (3) Apply a solution (50% by volume of phosphoric acid isopropyl alcohol) by brush to the area wire brushed, exercising care to prevent excessive application from running into the cylinder.

SCOTT

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL



Cleaning Setup
Figure 401

35-30-78

Page 402

Jan 25/83

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

WARNING: USE 1,1,1 TRICHLOROETHANE IN A WELL VENTILATED AREA ONLY. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN AND INHALATION OF TOXIC VAPORS

- (4) Utilizing a cleaning setup as illustrated in figure 401, place the cylinder, with neck down, in vertical position over the perforated tube (the diameter and length of the tube will be determined by the particular size of the cylinder being cleaned). Pump 1,1,1 Trichloroethane, slightly below its boiling point, through the tube thoroughly spraying the interior of the cylinder being cleaned for a period of three minutes. Remove cylinder from tube and allow complete drainage of 1,1,1 Trichloroethane into drain.
- (5) After completion of step (4), and using a cleaning setup similar to the setup illustrated in figure 401, pump a solution of Fisan-Enzodent (8 ounces (.227 kg) per each gallon (3.8 l) of water), at a temperature of 180°F (82.2°C), through the tube, thoroughly spraying the interior of the cylinder being cleaned for a period of three to five minutes. Accomplishment of step (5) will neutralize any acid constituents and destroy odor.
- (6) After completion of step (5), and using a cleaning setup similar to the setup illustrated in figure 401, pump water (at city pressure) at 160°F (71.1°C), through the tube, thoroughly spraying the interior of the cylinder being cleaned for a period of two minutes to remove any traces of alkaline residue.
- (7) After completion of step (6), and using a cleaning setup similar to the setup illustrated in figure 401, dry the interior of the cylinder with forced air heated to a temperature of 212°F (100.0°C), for a period of three to five minutes.
- (8) After completion of step (7), and after the cylinder has cooled to room temperature, reinspect the cylinder in accordance with Check.

NOTE: The cleaning process used should be checked initially and periodically as follows:

- a. Pour 50cc of anhydrous, chemically pure, 1,1,1 Trichloroethane into the processed cylinder. Cap and shake well for one to two minutes.

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- b. Remove cap and pour flushings into a clean Erlenmeyer flask. Distill the 1,1,1 Trichloroethane in a water bath. After the 1,1,1 Trichloroethane has been distilled, examine residue in flask. If oil marks are visible, check cleaning solutions, implements and pressure.
 - c. After completion of steps (a) and (b), and using a cleaning setup similar to the setup illustrated in figure 401, clear all traces of 1,1,1 Trichloroethane from the interior of the cylinder by blowing with dry, clean, oil-free air.
- B. After inspecting the valve assembly in accordance with Check, perform the following cleaning procedure.

WARNING: DO NOT ALLOW OIL, GREASE, FLAMMABLE SOLVENTS, OR OTHER COMBUSTIBLE MATERIALS TO COME IN CONTACT WITH PARTS THAT WILL BE EXPOSED TO PRESSURIZED OXYGEN. SUCH MATERIALS, AS WELL AS DUST, LINT, AND FINE METAL FILINGS ARE ALL POTENTIAL COMBUSTIBLES WHICH MIGHT, WHEN EXPOSED TO OXYGEN UNDER PRESSURE, IGNITE AND RESULT IN AN EXPLOSION.

- (1) Remove dirt and foreign particles from equipment by wiping with a clean lint-free cloth, or by blowing with clean oil-free air or nitrogen.

WARNING: USE 1,1,1 TRICHLOROETHANE IN A WELL VENTILATED AREA ONLY. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN AND INHALATION OF TOXIC VAPORS.

- (2) Metal parts which come in contact with oxygen and have become contaminated with grease can be cleaned by using a vapor degreasing method with 1,1,1 Trichloroethane. Blow clean and dry with a stream of clean dry, oil-free air.
- (3) Non-metallic parts such as silicone and rubber components may be cleaned by using an ultrasonic detergent and water cleaning system. Rinse parts in clean water and dry thoroughly before reassembly.



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

CHECK

1. Inspect exterior of cylinder for indications of abuse, dents and bulges.
2. Inspect neck of cylinders for cracks and distortion or damaged threads.
3. Inspect all cylinders for peeling external paint and obscure markings.
4. Inspect all high pressure cylinders for last date of hydrostatic test and type. If hydrostatic testing is required, tests shall be in accordance with prescribed procedures by facilities holding a current, valid DOT Approval.

NOTE: DOT Type 3HT cylinders require hydrostatic retesting every 3 years. DOT type 3A and 3AA cylinders require hydrostatic retesting every 5 years. Under certain usage conditions, DOT type 3A and 3AA cylinders may be retested at 10 year intervals. Refer to the current tariff of the "HAZARDOUS MATERIAL REGULATIONS OF THE DEPARTMENT OF TRANSPORTATION" (49 CFR 170) paragraph 173.34 (e) (15) for eligibility requirements.

NOTE: For Cylinder Inspection and Hydrostatic Retest, the use of Compressed Gas Association (CGA) pamphlets C-1, C-5, C-6, C-8 are recommended. These are available from:

CGA, INC.
1235 Jefferson Davis Highway
Arlington, VA 22202

5. Inspect the interior for defects which might render the cylinder unsafe.
6. Inspect the interior of cylinders for rust spots, improper parkerizing, or surface blemishes.
7. Inspect valves and/or regulator for cracks, nicks, dents, or burrs which might cause malfunction.
8. Inspect valve seats for scoring.
9. Inspect all threads of valves and/or regulators for damage.
10. Inspect overall condition of all components.

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

REPAIR

NOTE: Table 601 lists the consumable materials required for repair. Equivalent materials may be used.

MATERIAL	DESCRIPTION	MANUFACTURER*	REFER TO PARAGRAPH
Chromic Acid	Chromic Acid	V72658	4.E
Phosphoric Acid	Phosphoric Acid	V70829	4.C, 4.E
Phosphate Coating	Zn PO ₄	V44389	4.C
*Refer to Illustrated Parts List, paragraph 1.E for Vendor's Code.			

Consumable Materials for Repair
Table 601

1. Repair of parts, other than removing burrs, is not recommended. If a part is in need of repair, discard it and replace the part.
2. Replace all gaskets, washers, packings, diaphragms, non-metallic valve seats and filter screens at each overhaul.
3. Replace cylinders that show signs of abuse, dents, bulges, cracks, distortion, damaged threads, and/or defects which might render the cylinder unsafe (refer to Check, steps 3, 4, 5 and 7).

NOTE: DOT 3HT Type cylinders must be discarded at the end of twenty-four years from original test date or 4,380 pressurizations, whichever occurs first.

4. Cylinders that require interior protective treatment may be reparkerized as follows: (Refer to Check, step 6).
 - A. Sandblast cylinders internally and externally using fine grit shot.
 - B. Rinse cylinder in clean water.

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

- C. Apply a phosphate coating to the interior of the cylinder either by dipping or spraying. For dip-coating, a three minute minimum dip is recommended; for spray-coating, one minute minimum is recommended.

NOTE: The balanced aqueous solution of phosphoric acid, phosphates, and accelerating agents produces a uniform water insoluble crystalline coating varying from gray to black in color.

- D. Rinse cylinder in clean water.

- E. Rinse cylinder in hot chromic acid (140 to 210°F) (60.0 to 98.9°C).

NOTE: The pH of the chromic acid rinse will be maintained between 2 and 4 by the addition of flake chromic acid or a mixture of chromic and phosphoric acids.

- F. Dry the cylinder by using warm air or a drying oven.

NOTE: For maximum corrosion resistance, coating weights of 400 mg/sq. ft. (0.43 mg/cm²) are usually adequate. This coating weight may be reduced to 200 mg/sq. ft. (0.22 mg/cm²) if an activator (titanium salts) is used. The coating weight may be deceptive if loosely adherent deposits are obtained, since loosely adherent deposits give inferior performance. Finely crystalline zinc phosphate coatings provide the best corrosion resistance.

- G. If the exterior finish is removed, it must be recoated with 1000 mg/sq. ft. min. (1.08 mg/cm² min.) phosphate, and primed per MIL-P-8585A, color Y.

5. Remark and/or repaint cylinders in accordance with information outlined in figure 2.

COMPONENT MAINTENANCE MANUAL WITH IPL

ASSEMBLY

NOTE: Table 701 lists the consumable materials necessary for assembly. Equivalent materials may be used except for oxygen lubricant.

MATERIAL	DESCRIPTION	MANUFACTURER*	REFER TO PARAGRAPH
Thread Sealing Tape	Permacel No. 412	V99742	1.G(5), 2.A, 2.B, 2.C, 2.E, 2.F, 4.B, 4.C
Adhesive	Insa-Lute Adhesive No. 1	V80703	2.D
Loctite Sealant	Loctite, Grade C	V05972	2.R
Dow Corning Adhesive	Dow Corning Adhesive No. A-4000	V71984	3.E
Oxygen Lubricant	Krytox 240AC	V18873	1.G (2), 1.G (4), 2.G, 2.H, 2.I, 2.K
Loctite Sealant	Loctite 222	V05972	1.G (3)
Oxygen	MIL-O-27210, Type I	V07098	3.C
Lockwire	MS20995C20	-----	2.K

*Refer to Illustrated Parts List, paragraph 1.E for Vendor's Code

List of Consumable Materials for Assembly
Table 701

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

1. Outlet Assemblies

- A. Part No. 8572. (See IPL figure 6.) Place filter (8), spring (7), poppet (6) and gasket (5) in adapter (9) and thread body assembly (2) into adapter (9).
- B. Part No. 5052. (See IPL figure 8.) Place retainer (12) and spring (9) in body (13). Place gasket (11) on seat (10), and thread base (7) onto the body. Install washer (5) and screen (4) in base (7). Pack glass cord (3) into the opening of base (7). Install screen (4) and screw (2).
- C. Part No. 5507. (See IPL figure 7.) Place spring (11), seat (10) and washers (8 and 9) in body (12). Place washer (7) in guide assembly (6), and screw guide assembly (6) into body (12). Place screen (4) into body (12), and pack glass cord (3) into the body. Install screen (4) and screw (2).
- D. Part 5009. (See IPL figure 5.) Place filter (17) on flow port (14), and hold in place by installing ring (16). Install gasket (18) in stud (8), and thread flow port (14) into stud (8). Install gasket (10), valve (11), and spring (13) into receptacle (19). Thread stud (8) into receptacle (19). Pack glass cord (6) into stud (8). Thread screw (4) into stud fitting (8) and install cover (3).
- E. Part No. 800503-00. (See IPL figure 5.) Install gasket (18) in stud (8) and thread flow port (15) into stud (8). Install gasket (10), valve (11), and spring (13) into receptacle (19). Thread stud (8) into receptacle (19). Place plug of cover (3) into open port of receptacle (19).
- F. Part No. 5041. (See IPL figure 4.) Position pins (17) on case (18), and hook springs (16) over the grooved ends of the pins. Install seat (15), valve (14), and spring (13) in case (18). Slide washer (5) and cap (4) onto case (18). Assemble nut (3) and cover (2); then thread nut (3) onto case (18). Place screen (9) into the opening of body (12). Pack glass cord (8) into the opening and install screen (7) and screw (6).



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

G. Part No. 802863-02. (See IPL figure 10). Reassemble as follows:

- (1) Place spring (14) in poppet (13); install in body (15).
- (2) Sparingly apply a wipe coat of Krytox to packing (12) and install in sleeve (9). Install insert (11) and seal (10) in sleeve (9).
- (3) Insert pins (8) in sleeve (9). Apply Loctite 222 to the external threads of sleeve (9) and thread the sleeve into body (15), being sure the pins remain in the sleeve.

NOTE: Use of plug (6) will aid in threading the sleeve into the body.

- (4) Sparingly apply a wipe coat of Krytox to packing (5) and install in the groove in plug (6). Install cover (4) on body (15) and plug (6), then install and seat plug (6) in sleeve (9).
- (5) Apply 1-1/2 turns of thread sealing tape to nipple (2) in the direction of the thread spiral, beginning at the first thread. In no case shall the tape extend beyond the first thread. Trim off excess tape. Thread nipple (2) into body (15).

2. 5510 Series Regulator Assemblies. (See IPL figure 9.)

NOTE: Regulator body (49 or 49A)) must be assembled to a cylinder before assembly of the regulator.

- A. If regulator body (49 or 49A)) was removed from a cylinder, make sure drain tube (48) is pressed into body (49 or 49A). Place the appropriate cylinder in a suitable holding fixture and wrap 1-1/2 turns of thread sealing tape to body (49 or 49A), in the direction of the thread spiral, beginning with the first thread. Trim off excess tape. Tighten body (49 or 49A) into cylinder using wrench (1, figure 901). Torque all bodies per Table 801. Position body so that writing on cylinder will be in appropriate position when unit is assembled.

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- B. Wrap 1-1/2 turns of thread sealing tape to gauge (31 or 31A, IPL figure 9) in the direction of the thread spiral, beginning with the first thread. In no case shall the tape extend beyond the first thread. Trim off excess tape. Thread gauge (31 or 31A) into body (49 or 49A). Use a thin wrench on the gauge pipe connection square. Torque per Table 801.
- C. Wrap 1-1/2 turns of thread sealing tape to valve assembly (24) in the direction of the thread spiral, beginning with the first thread. In no case shall the tape extend beyond the first thread. Trim off excess tape. Assemble valve assembly (24) to regulator body (49 or 49A) after installing filters (25) and (27). Torque per Table 801.
- D. If necessary, cement seat (23) to cap (22) using adhesive. Coat seat (23) and cap (22) with Insa-Lute adhesive, then join and allow parts to air dry. Thread cap (22) with seat (23) onto charging valve assembly (24) after adhesive has thoroughly dried.
- E. Wrap 1-1/2 turns of thread sealing tape to relief valve (32) in the direction of the thread spiral, beginning with the first thread. In no case shall the tape extend beyond the first thread. Trim off excess tape. Install valve in body (49 or 49A). Do not tighten valve at this time. It is necessary to remove relief valve when testing regulator assembly. When valve is finally installed, torque per Table 801.
- F. Wrap 1-1/2 turns of thread sealing tape to appropriate outlet assemblies in the direction of the thread spiral, beginning with the first thread. In no case shall the tape extend beyond the first thread. Trim off excess tape. Install the appropriate outlet assemblies at this time. Torque outlets per Table 801.
- G. Insert filter (21) in opening of body (49 or 49A) such that opening in filter is over the raised portion of seat. Apply a wipe coat of Krytox to packing (18) then install bushing (19) or plug (20) in opening of body (49 or 49A). Tighten bushing until it bottoms on body (49 or 49A). Observe that filter (21) is not wrinkled.
- H. Apply a wipe coat of Krytox to stem of stem assembly (15).



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- I. Apply a wipe coat of Krytox to threaded area of head assembly (17) and install head assembly (17) in bushing (19) using stem assembly (15) to thread head assembly (17) into bushing (19).
- J. Install seat (16) on stem assembly (15) and push seat (16) into bushing (19).
- K. Apply a wipe coat of Krytox to packing (14 or 14A), then assemble packing (14 or 14A) on nut (13) and thread nut (13) into bushing (19). Lockwire nut (13) to body (49 or 49A) per the applicable instructions of MS33540.
- L. Place washers (11 and 12) on stem assembly (15). Assemble handle (8) and attach it to stem assembly (15) with washer (10) and nut (9). Press plate (7) on handle (8).
- M. Position washer (30) and disc (29) in the opening of body (49) and torque safety plug (28) per Table 801.
- N. Place spring (47) and guide (46) in body (49 or 49A).
- O. Inspect the center hole of seat (44) and the seating area of pin (45) with a magnifying glass or microscope. These areas must be smooth and clean without cracks, nicks, or burrs. Insert pin (45) in seat (44) and place the assembly into body (49 or 49A).
- P. Inspect the thread of holder (43) with a magnifying glass or microscope. Make sure that the first thread does not have a sharp leading edge and that the entire thread is free of burrs and rough edges. Torque holder (43) into body (49 or 49A) per Table 801. Over-torquing may result in damage to seat (44).
- Q. Place plate (42), diaphragm (41), three rings (40), plate (39), spring (38) and guide (37) in position in the regulator body.

NOTE: Three slip rings (40) are normally required to properly seal diaphragm (41) while engaging a maximum number of threads of case (36). The number of rings (40) may be altered if necessary to accomplish this.

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

- R. Thread case (36) onto body (49 or 49A). Tighten case (36) until it bottoms on body (49 or 49A). Install screw (35) loosely. When ready to test unit, apply Loctite, Grade C to setscrew (35) then adjust unit before Loctite sets up.

NOTE: Do not install plate (33) and screws (34) until completion of Testing.

3. Part No. 6379 and 800649 Series Demand and Pressure/Demand Oxygen Regulators. (See IPL figure 3).
- A. Thread adapter (25 or 26) onto the outlet port of case (28).
- B. Install screen (27) in the inlet port of case (28).
- C. Install gasket (24) and attach valve assembly (20) to case (28), using washers (22 and 23) and screws (21). Connect a supply of oxygen to the inlet port, and adjust oxygen pressure to 85 psi (0.59 MPa). Cover sealing area of valve assembly (20) with a small amount of clean water. Bubbles indicate leakage which must be corrected. After successful completion of this test, remove the oxygen source, dry the regulator by blowing with clean, dry, water-pumped air, and continue reassembly.
- D. Attach deflector (18) to case (28) with screws (19). Clearance must be noted between the demand valve and the deflector. Lack of clearance will cause the demand valve to open.
- E. Install diaphragm assembly (16) over case (28) so that diaphragm edge extends to edge of machined surface beyond groove. Wrap cord (17) around diaphragm at groove in case four full turns and tie securely. The diaphragm must lay smoothly without wrinkles or folds. Apply Dow Corning adhesive over knot tied in cord (17).
- F. Rivet plates (8, 11 and/or 12) to cover (14 and/or 15) with rivets (10 and 13). Install plate (9) if it was removed.
- G. Install button (13D) in cover (15), then attach spring (13C) to the narrow slots in the button inside the cover.

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

- H. Install plate and lever assembly (13B) in cover (15) with the lip of the lever in the recess slot in cover (15). Place one end of spring (13A) in the hole in the lever of plate and lever assembly (13B) and the other end in the hole nearest the closed face of cover (15).

NOTE: Spring (13A) shall measure 3-1/4 in. (8.25 cm), tip-to-tip, prior to installation.

- I. Assemble cover assembly to case (28) with screws (7).

4. 5600 Series. (See IPL figure 2.)

NOTE: All components of the 5600 Series must be completely tested prior to assembly. Instructions for the testing of components are listed under Testing.

- A. With regulator (38) assembled to cylinder (45), place loop of sling (17) over regulator (38) onto neck of cylinder (45).
- B. Wrap 1-1/2 turns of thread sealing tape to elbow assembly (4) in the direction of the thread spiral, beginning with the first thread. In no case shall the tape extend beyond the first thread. Trim off excess tape. Thread the elbow assembly into regulator (38).
- C. Wrap 1-1/2 turns of thread sealing tape to connector assembly (3) in the direction of the thread spiral, beginning with the first thread. In no case shall the tape extend beyond the first thread. Trim off excess tape. Thread the connector assembly into regulator (7).
- D. Assemble bracket (13) to regulator (7) with screws (11) and washers (12), then align this unit on the cylinder and unite elbow assembly (4) to connector assembly (3).
- E. Connect bracket (13) to cylinder (45) by installing clamp (14), then secure loose end of sling (17) to the cylinder with clamp (24).
- F. If necessary, attach identification plate (35) to regulator with screws (37). Affix instruction plates (43, 44 and 44A) to cylinder (45), if necessary.

NOTE: Outlet assemblies (28) are normally assembled to regulator (38) when regulator is reassembled.

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

5. 5500 Series. (See IPL figure 2.)

NOTE: All components of the 5500 Series must be completely tested prior to final assembly. Refer to Testing instructions.

- A. With regulator (38) assembled to cylinder (45), place loop of sling (17) over regulator (38) onto neck of cylinder (45). Secure loose end of sling (17) to cylinder (45) with clamp (24).
- B. If necessary, attach identification plate (35) to regulator with screws (37). Affix instruction plates (43, 44 and 44A) to cylinder (45), if necessary.

NOTE: Outlet assemblies (28) are normally assembled to regulator (38) when regulator is reassembled.

6. Storage Instructions

- A. Make sure on-off valve assembly is completely closed prior to placing the assembly in storage.
- B. Plug all openings with suitable dust caps and wrap the unit in a clean plastic bag to prevent dust accumulation. Do not use preservative coatings of any type.
- C. Make sure that cylinder pressure is always a minimum of 200 psi (1.38 MPa).



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

FITS AND CLEARANCES

1. Table 801 presents the torque values necessary to assemble the unit.

UNIT	TORQUE lbf·in. (N·m)
Outlet assemblies (28, IPL figure 2)	*40-80 (4.5-9.0)
Charging Valve Assembly (24, IPL figure 9)	*60-250 (6.8-28.2)
Safety Plug (28, IPL figure 9)	150 (16.9)
Gauge (31 or 31A, IPL figure 9)	**40 (4.5)
Relief Valve (32, IPL figure 9)	*25-50 (2.8-5.6)
Seat Holder (43, IPL figure 9)	*50-125 (5.6-14.1)
Regulator Body (49, IPL figure 9) All except P/N 5053-03 & 5053-13 (1/2 ANPT)	1200 (135.6)
P/N 5053-03 & 5053-13 (1 ANPT)	1800 (203.4)
*Torque to minimum values. If leakage occurs, retorque to a higher value but do not exceed the maximum.	
**Determined by orientation.	

Assembly Torque Values
Table 801

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

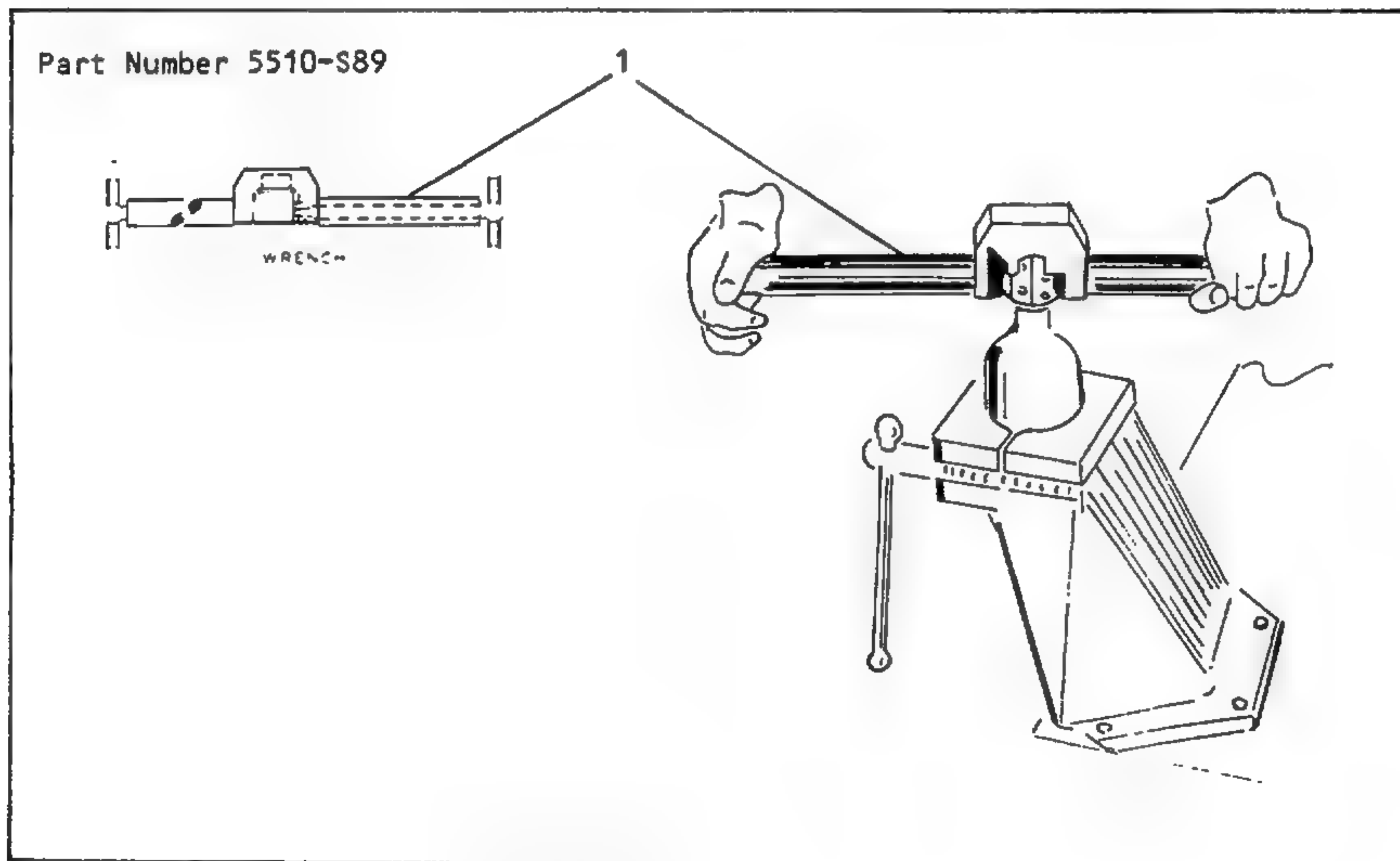
SPECIAL TOOLS, FIXTURES AND EQUIPMENT

1. All special tools required to overhaul the portable oxygen breathing equipment are listed in figure 901 and illustrated in figure 902. Equivalent tools may be used.

INDEX NO.	PART NO.	NOMENCLATURE	USE
1	5510-S89	Wrench	Used to turn regulator body (49 or 49A, IPL figure 9) into cylinder (43, IPL figure 2)
2	Deleted		

NOTE: All special tools listed are manufactured by Scott Aviation, Lancaster, New York.

Special Tools
Figure 901



Special Tools
Figure 902



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

ILLUSTRATED PARTS LIST

1. This Illustrated Parts List lists and describes the parts of the 5500 Series and 5600 Series, Portable Oxygen Breathing Units.
 - A. The Illustrated Parts List consists of nine parts listings and nine completely indexed drawings. The breathing units are followed immediately by their component parts, properly indented thereunder, to show their relationship to the units.
 - B. The quantities listed in the "UNITS PER ASSY" column are, in the case of assemblies, the total quantity used per breathing unit at the location indicated, while the component parts indented under the assemblies are the quantity used per assembly. The quantities specified, therefore, are not necessarily the total used per breathing unit. See the Numerical Index for the total used per breathing unit. It should be noted that the index quantity only reflects the use of one outlet assembly. If more than one outlet is present, quantities must be adjusted accordingly.
 - C. The part numbers listed in the "PART NUMBER" column are Scott Aviation part numbers except standard parts, which are listed by "MS" and "AN" part numbers, and vendor items which are listed by vendor part numbers.
 - D. When the quantity of a part is to be selected as required, the abbreviation "AR" will appear in the "UNITS PER ASSY" column.
 - E. A six place code following the description of a part indicates the manufacturer of that part. Standard parts and parts carried under Scott part numbers have no six place vendor code. The following list contains the codes, and names and addresses of manufacturers supplying items or articles for the breathing unit. This listing includes the vendor's code presented in Table 101, 401, 601 and 701.



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

VENDOR'S CODE

<u>CODE</u>	<u>NAME AND ADDRESS</u>
V00287	CEM Co., Inc. Danielson, Conn.
V05972	American Sealants Co. Hartford, Conn.
V07098	Linde Division of Union Carbide Tonawanda, New York
V14674	Corning Glass Works Corning, New York
V18034	Nupro 4800 East 345th St. Willoughby, Ohio
V18873	E.I. DuPont DeNemours & Company, Inc. Petroleum Chemicals Division Wilmington, Delaware
V21343	Owens-Corning Fiberglass Corp. Huntington, Pennsylvania
V44389	Oakite Products Berkeley Heights, New Jersey
V45722	Parker Kaylon Division of General American Transportation Corp., Clifton, New Jersey
V49315	Puritan Equipment, Inc. Lenexa, Kansas
V66295	Witteck Manufacturing Co. Chicago, Illinois
V71984	Dow Corning Corp. Midland, Michigan
V78189	Shakeproof Division of Illinois Tool Works Inc. Elgin, Illinois
V80703	Sauereisen Cements Co. Pittsburgh, Pennsylvania

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

VENDOR'S CODE - continued

<u>CODE</u>	<u>NAME AND ADDRESS</u>
V81168	Linear, Inc. Philadelphia, Pennsylvania
V99742	Johnson and Johnson Inc. Permacel Division New Brunswick, New Jersey

F. The following effect codes have been assigned to the items contained in IPL figure 1.

<u>PART NO.</u>	<u>EFFECT CODE</u>
5500 SERIES & 5600 SERIES	Select applicable codes from listings in IPL figure 1.
Select effect code from IPL figure 1	1
Used on 5600 Series	2
Used on 5600 Series with 6084-1, 6084-2 and 6084-3 cylinders	3
Used on 5600 Series with 6084-4 cylinder	4
Used on 5600 Series with 6084-5 cylinder	5
Used on 5600 Series with 6084-6 and 6084-7 cylinder	6
Used on 5500 and 5600 Series with 6084-1, 6084-2 and 6084-3 cylinders	7
Used on 5500 and 5600 Series with 6084-4 cylinder	8
Used on 5500 & 5600 Series with 6084-5, 6084-6 and 6084-7 cylinders	9
Used on 5500 Series with 801663-00 Strap Assembly	10
Used on 5500 Series	11

2. How to use this Illustrated Parts List

- A. If neither the part number nor the nomenclature is known, the part can be found by comparison with the exploded view illustration. When located on the illustration, the item number will refer to the line in the Illustrated Parts List with the part number and the nomenclature.

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

- B. If the part number is known, refer to the Numerical Index and find the part number. Opposite the part number is the figure and item number which refers to the Illustrated Parts List. Proper nomenclature is opposite the item number on the Group Assembly Parts List page.

SCOTT

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

THIS PAGE INTENTIONALLY LEFT BLANK

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

5500 - A 1 A - A 5 A

BASIC SERIES NO.

CYLINDER AND REGULATOR ASSEMBLY						CYLINDER FINISH		HARNESSE ASSEMBLIES			FLOW SETTING		ALTITUDE		OUTLET ASSEMBLY		
PART NO. CODE LETTER	CYLINDER PART NO.	CYL EFFECT CODE	REGULATOR ASSEMBLY		REGULATOR EFFECT CODE	CODE 1 Dwg. No. 6086-1 for gray- green with yellow lettering	PART NO CODE LETTER	HARNESSE PART NO	EFFECT CODE	PART NO CODE LETTER	FLOW (SLPM)	1000 CODE	PART NO CODE LETTER	OUTLET PART NO.	EFFECT CODE		
			AL ALY	BRASS												ALUM	BRASS
A	6084-1	A	5510	5510-10	H	CODE 3 Dwg. No. 800914-04 for blue with white lettering	A	801680-00	M	A	05	No. "	A	5009-00	U		
B	6084-2	B	5510	5510-10	H		B	801658-00	N	B	2	Altitude	B	5041-00	V		
C	6084-3	C	5510	5510-10	H		C	801682-00	P	C	25	in Feet	C	5052-00	W		
D	6084-4	D	5510-3	5510-13	J		D	801660-01	Q	D	27		D	5507-00	Y		
E	6084-5	E	5510-3	5510-13	J		E	801660-03	R	E	3		E	8572-02	Z		
F	6084-6	F	5510-3	5510-13	J		F	801660-05	S	F	4		F	6818-00	AA		
G	6084-7	G	5510-3	5510-13	J	CODE 5 Dwg. for 6090 for green with yellow neck	G	801683-00	T	G	7		G	800503-00	AE		
H	6084-2	B	5510-4	5510-14	K		P	801808-05	AJ	H	8		M	10003566	AF		
J	6084-1	A	5510-5	5510-15	L		Q	801807-01	AK	K	07		N	36728-01	AS		
K					L		R	801806-01	AL	L	45		P	802863-02	AY		
L	6084-2	B	5510-5	5510-15	L	CODE 6 Dwg. for 6085 for Wakefield green	S	801807-02	AM	X	O			R	10006017	BH	
M	6084-3	C	5510-5	5510-15	L		T	801807-03	AN								
N	6084-4	D	5510-7	5510-17	AR		U	801808-02	AP								
P	6084-4	D	5510-9	5510-19	AT		V	801808-03	AV								
Q	6084-6	F	5510-17	5510-17	BD	CODE 9 Dwg. No. 800520-01 for Wakefield green with placards	W	803777-01									
R	6084-3	C	5510-20	5510-20	BG		X	OMIT HARNESSE									

Effective April 1, 1982, the configurations in this column no longer available

These configurations to be used when 3 constant flow outlets are required

Effective April 1, 1982, the configurations in this column no longer available
These configurations to be used when 3 constant flow outlets are required

Effect Code (Sheet 1 of 2)

Figure 1

35-30-7

 Page 1006
Jan 31/86

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

5600 - 1 A 1 A - A S A

BASIC SERIES NO.

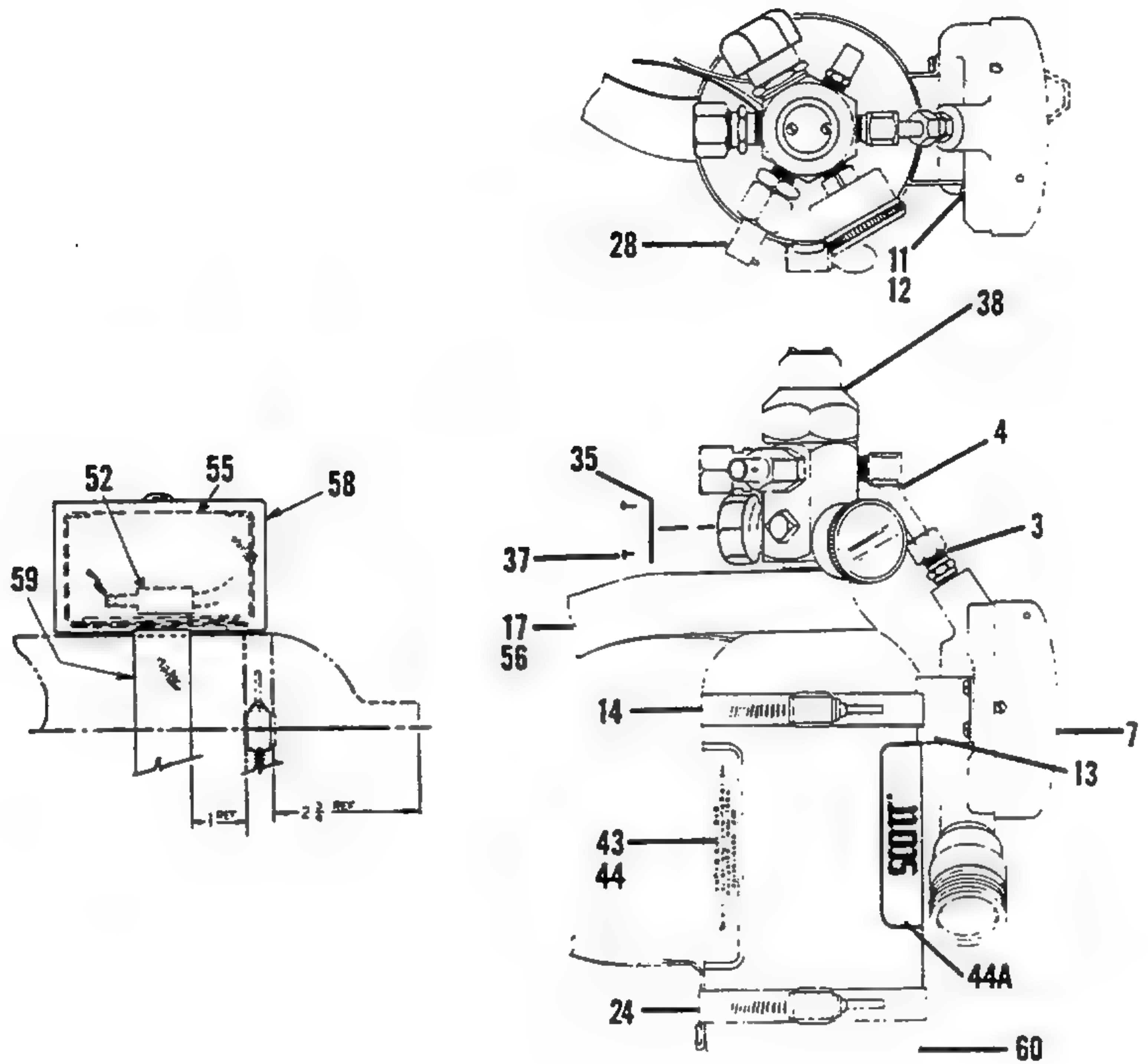
RESPIRATOR REGULATOR			CYLINDER AND REGULATOR ASSEMBLY							CYLINDER FINISH		HARNESS ASSEMBLIES			FLOW SETTING		ALTITUDE		OUTLET ASSEMBLY		
PART NO CODE NO	REGULATOR PART NO	EFFECT CODE	PART NO CODE LETTER	CYLINDER PART NO	CYL EFFECT CODE	REGULATOR ASSEMBLY		REGULATOR EFFECT CODE		CODE 1 Dwg No 6086-1 for gray-green with yellow lettering	PART NO CODE LETTER	HARNESS PART NO	HARNESS EFFECT CODE	PART NO CODE LETTER	PART NO CODE LETTER	FLOW (SLPM)	1000 X CODE	PART NO CODE LETTER	OUTLET PART NO	EFFECT CODE	
						AL ALY	BRASS	ALUM	BRASS												
1	6379-2C	AB	A	6084-1	A	5510	5510-10	H	AZ	CODE 2 Per MIL-STD-101B	A	801660-00	M	A	A	05	No "	A	5009-00	U	
2	6379-2D	AC	B	6084-2	B	5510	5510-10	H	AZ		B	801658-00	N	B	B	2	Altitude in feet	B	5041-00	V	
8	800849-00	AG	C	6084-3	C	5510	5510-10	H	AZ		C	801662-00	P	C	C	25		C	5052-00	W	
9	800849-01	AM	D	6084-4	D	5510-3	5510-13	J	BA		D	801660-01	Q	D	D	27		D	5507-00	Y	
			E	6084-5	E	5510-3	5510-13	J	BA	CODE 3 Dwg No 800914-04 for blue with white lettering	E	801660-03	R	E	E	3		E	8572-02	Z	
			F	6084-6	F	5510-3	5510-13	J	BA		F	801660-05	S	F	F	4		K	6818-00	AA	
			G	6084-7	G	5510-3	5510-13	J	BA						G	7		M	10003566	AF	
			A	6084-1	A	5510-5	5510-15	L	BC	CODE 5 Dwg No 6090 for green with yellow neck					H		N	36726-01	AS		
			B	6084-2	B	5510-5	5510-15	L	BC						K						
			C	6084-3	C	5510-5	5510-15	L	BC	CODE 6 Dwg No 8085 for Wakefield green					L						
			D	6084-4	D	5510-8	5510-16	AW	BE	CODE 9 Dwg No 800520-01 for Wakefield green with placards					X						

Effective April 1, 1982, the configurations in this column no longer available
These configurations to be used when 2 constant flow outlets are required

Effective April 1, 1982, the configurations in this column no longer available
These configurations to be used when 2 constant flow outlets are required

Effect Code (Sheet 2 of 2)
Figure 1

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL



Oxygen Breathing Unit 5500 and 5600 Series
Figure 2

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
2-1	5500 SERIES		PORTABLE OXYGEN BREATHING UNIT	1	RF
-2	5600 SERIES		DUAL PURPOSE OXYGEN BREATHING UNIT	1	RF
3	5602		. CONNECTOR ASSEMBLY	2	1
4	5601		. ELBOW ASSEMBLY	3	1
-5	5601B		. ELBOW ASSEMBLY	4,5	1
-6	5601C		. ELBOW ASSEMBLY	6	1
7	6379-2C		. REGULATOR-OXYGEN, DEMAND (SEE IPL FIGURE 3 FOR BREAKDOWN)	AB	1
-8	6379-2D		. REGULATOR-OXYGEN, DEMAND (SEE IPL FIGURE 3 FOR BREAKDOWN)	AC	1
-9	800649-00		. REGULATOR ASSY-OXYGEN, PRESSURE/DEMAND (SEE IPL FIGURE 3 FOR BREAKDOWN)	AG	1
-10	800649-01		. REGULATOR ASSY-OXYGEN, PRESSURE-DEMAND (SEE IPL FIGURE 3 FOR BREAKDOWN) (ATTACHING PARTS)	AH	1
11	59602-00		. SCREW	2	4
12			DELETED -----*		
13	10001296		. BRACKET	2	1
14	WWD122		. CLAMP (V66295)	3	1
-15	WWD176		. CLAMP (V66295)	4	1
-16	WWD224		. CLAMP (V66295)	5,6	1
17	801660-00		. SLING STRAP (SUPER- SEDES P/N 5017)	M	1
-18	801658-00		. STRAP ASSEMBLY (SUPER- SEDES P/N 21441)	N	1
-19	801662-00		. SLING ASSEMBLY (SUPER- SEDES P/N 21442)	P	1
-20	801660-01		. STRAP ASSEMBLY (SUPER- SEDES P/N 5017-1)	Q	1
-21	801660-03		. STRAP ASSEMBLY (SUPER- SEDES P/N 5017-3)	R	1
-22	801660-05		. STRAP ASSEMBLY (SUPER- SEDES P/N 5017-5)	S	1
23	801663-00		. STRAP ASSEMBLY (SUPER- SEDES P/N 12203) (ATTACHING PARTS)	T	1
24	WWD120		. CLAMP (V66295)	7	1
-25	WWD176		. CLAMP (V66295)	8	1
-26	WWD224		. CLAMP (V66295)	9	1

- ITEM NOT ILLUSTRATED

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
2-27	WWD224		• CLAMP (V66295) -----*-----	10	2
28	5041		• OUTLET ASSY (SEE IPL FIGURE 4 FOR BREAKDOWN)	V	1
-29	5009-00		• OUTLET ASSY (SEE IPL FIGURE 5 FOR BREAKDOWN)	U	1
-30	5507		• OUTLET ASSY (SEE IPL FIGURE 7 FOR BREAKDOWN)	Y	1
-31	5052		• OUTLET ASSY (SEE IPL FIGURE 8 FOR BREAKDOWN)	W	1
-32	8572-02		• OUTLET ASSY (SEE IPL FIGURE 6 FOR BREAKDOWN)	Z	1
-33	6818		• PLUG-PIPE	AA	1
-34	800503-00		• OUTLET ASSY (SEE IPL FIGURE 5 FOR BREAKDOWN)	AE	1
-34A	36728-01		• OUTLET	AS	1
-34B	802863-02		• OUTLET ASSY (SEE IPL FIG. 10 FOR BREAKDOWN)	AY	1
-34C	10006017		• OUTLET ASSEMBLY	BH	1
35	5057		• PLATE-IDENTIFICATION	11	1
-36	5057-1		• PLATE-IDENTIFICATION (ATTACHING PARTS)	2	1
37	U0X1-8		• SCREW-DRIVE-TYPE U NO. 0 BY 1/8 IN. LG (V45722) -----*-----	11,2	2
38	5510		• REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN)	H	1
-38A	5510-10		• REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN) (SB35-48)	AZ	1
-39	5510-3		• REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN)	J	1
-39A	5510-13		• REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN) (SB35-48)	BA	1
-40	5510-4		• REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN)	K	1
40A	5510-14		• REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN) (SB35-48)	BB	1

R

- ITEM NOT ILLUSTRATED

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY	
2-41	5510-5		. REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 4 FOR BREAKDOWN)	L	1	
-41A	5510-15		. REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN) (SB35-48)	BC	1	
-42			DELETED			
-42A	5510-7		. REGULATOR ASSY-OXYGEN IPL FIGURE 9 FOR BREAKDOWN)	AR	1	
-42B	5510-17		. REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN) (SB35-48)	BD	1	
-42C	5510-8		. REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN)	AW	1	
-42D	5510-18		. REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN) (SB-35-48)	BE	1	
-42E	5510-9		. REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN)	AW	1	
-42F	5510-19		. REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN) (SB35-48)	BF	1	
-42G	5510-20		. REGULATOR ASSY-OXYGEN (SEE IPL FIGURE 9 FOR BREAKDOWN)	BG	1	R
43	5608		. PLATE-INSTRUCTION	2	1	
44	10006936		. PLATE-INSTRUCTION	11	1	R
44A	10005922		. DECAL	2,11	1	R
-45	10003566		. COUPLING-OXYGEN	AF	1	
-46	801807-01		. MASK, STORAGE BAG AND HARNESS ASSEMBLY	AJ	1	
-47	801808-01		. MASK, STORAGE BAG AND HARNESS ASSEMBLY	AK	1	
-48	801807-02		. MASK, STORAGE BAG AND HARNESS ASSEMBLY	AL	1	
-49	801807-03		. MASK, STORAGE BAG AND HARNESS ASSEMBLY	AM	1	
-50	801808-02		. MASK, STORAGE BAG AND HARNESS ASSEMBLY	AN	1	
-51	801808-03		. MASK, STORAGE BAG AND HARNESS ASSEMBLY	AP	1	

- ITEM NOT ILLUSTRATED

35-30-78

Page 1011
May 31/89

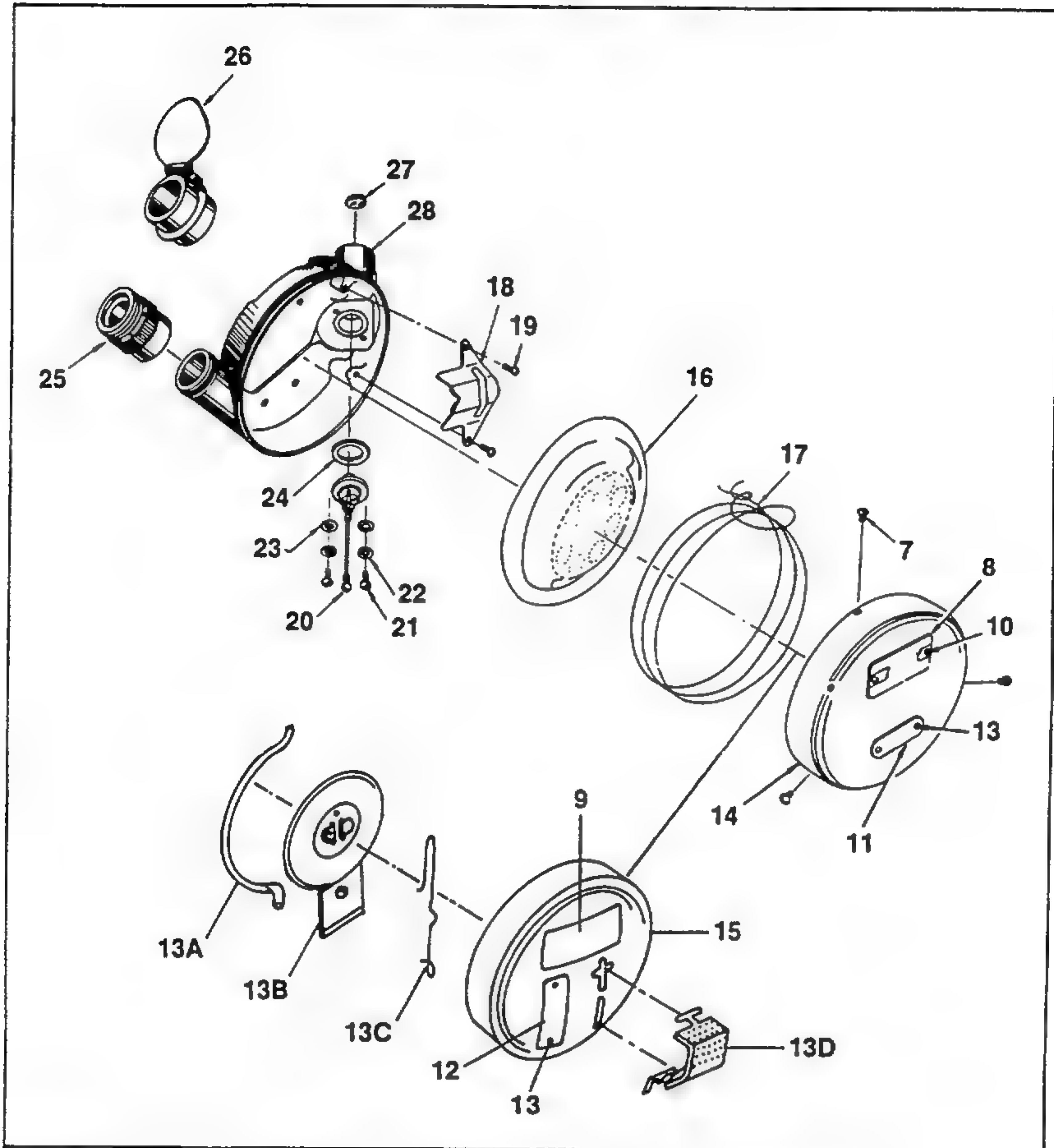
5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
2-51A	801808-05		. MASKS, STORAGE BAG AND HARNESS ASSEMBLY	AU	1
-51B	803177-01		. MASKS, STORAGE BAG AND HARNESS ASSEMBLY	AV	1
52	14807		. . CONNECTOR	AJ,AK	1
-53	5065-10		. . CONNECTOR	AL,AN	1
-53A	5065-10		. . CONNECTOR	AU,AV	2
-54	29559		. . NIPPLE	AM,AP	1
55	59270-00		. . MASK ASSEMBLY	AJ-AP	1
-55A	59270-00		. . MASK ASSEMBLY	AU	2
-55B	28672-211		. . MASK ASSEMBLY	AV	2
56	801660-00		. . STRAP-SLING	AK,AN, AP,AU, AU, AV	1
57	801662-00		. . SLING ASSEMBLY	AJ,AL, AM	1
58	801809-01		. . BAG ASSY-STORAGE, MASK	AJ-AP, AV	1
-58A	801809-01		. . BAG ASSY-STORAGE, MASK (ATTACHING PARTS)	AU	2
59	36879-01		. . FASTENER	AJ-AP AU,AV	1
60	*6084-3		. CYLINDER-OXYGEN (11.00 CU. FT.)	C	1
-61	*6084-1		. CYLINDER-OXYGEN (4.25 CU. FT.)	A	1
-62	*6084-2		. CYLINDER-OXYGEN (7.15 CU. FT.)	B	1
-63	*6084-4		. CYLINDER-OXYGEN (22.00 CU. FT.)	D	1
-64	*6084-5		. CYLINDER-OXYGEN (28.8 CU. FT.)	E	1
-65	*6084-6		. CYLINDER-OXYGEN (38.4 CU. FT.)	F	1
-66	*6084-7		. CYLINDER-OXYGEN (48.3 CU. FT.)	G	1
*For ordering spare cylinders it is necessary to use the cylinder part number and cylinder finish number (see IPL figure 1) to provide proper identification of the finished cylinder.					

- ITEM NOT ILLUSTRATED

SCOTT

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**



**Demand/Pressure Demand Oxygen Regulators, 6379 Series/800649 Series
Figure 3**

35-30-78

Page 1013
May 31/89

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY	
3-1	6379-2C		REGULATOR-OXYGEN-DEMAND (SEE ITEM 7, IPL FIGURE 2 FOR NHA)	AB	RF	
-2	6379-2D		REGULATOR-OXYGEN-DEMAND (SEE ITEM 8, IPL FIGURE 2 FOR NHA)	AC	RF	
-3	800649-00		REGULATOR-OXYGEN- PRESSURE/DEMAND (SEE ITEM 9, IPL FIGURE 2 FOR NHA)	AG	RF	
-4	800649-01		REGULATOR-OXYGEN- PRESSURE/DEMAND (SEE ITEM 10, IPL FIGURE 2 FOR NHA)	AH	RF	
-5	6050C		. COVER ASSEMBLY	AB,AC	1	
6	800651-00		. COVER ASSEMBLY (ATTACHING PARTS)	AG,AH	1	
7	MS33506-212		. SCREW	AB,AC AG,AH	3	
			-----★-----			
8	6375-4		. . PLATE-ID	AB,AC	1	
9	10001297		. . PLATE-ID (ATTACHING PARTS)	AG,AH	1	
10	MS20470A2-2		. . RIVET	AB,AC	2	
			-----★-----			
11	6378		. . PLATE-INST	AB,AC	1	
12	6597		. . PLATE-INST (ATTACHING PARTS)	AG,AH	1	
13	MS20470A2-2		. . RIVET	AB,AC, AG,AH	2	
			-----★-----			
13A	6586		.. SPRING-COMPRESSION	AG,AH	1	R
13B	6588		.. PLATE AND LEVER ASSY	AG,AH	1	R
13C	6583		.. SPRING-SLIDE BUTTON	AG,AH	1	R
13D	6584		.. BUTTON-SLIDE	AG,AH	1	R
14	6050-1		. . COVER-CASE	AB,AC	1	
15	6582		. . COVER-CASE	AG,AH	1	
16	13374-00		. DIAPHRAGM ASSY (ATTACHING PARTS)	AB,AC, AG,AH	1	
17	A1215-1		. CORD-DIAPHRAGM	AB,AC, AG,AH	1	
			-----★-----			

- ITEM NOT ILLUSTRATED

35-30-78

Page 1014
May 31/89

5000

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
3 18	A1126		. DEFLECTOR	AB,AC, AG,AH	1
			(ATTACHING PARTS)		
19	9036		. SCREW	AB,AC, AG,AH	2
			-----*-----		
20	6055E		. VALVE ASSY-DEMAND	AB,AC, AG,AH	1
			(ATTACHING PARTS)		
21	MS35206-213		. SCREW	AB,AC, AG,AH	2
22	MS35333-36		. WASHER	AB,AC, AG,AH	2
23	6066-00		. WASHER-FLAT	AB,AC, AG,AH	2
			-----*-----		
24	A1120B		. GASKET-DEMAND VALVE SEAT	AB,AC, AG,AH	1
25	5603-00		. ADAPTER	AB,AG	1
26	5606-00		. ADAPTER	AC,AH	1
27	6812-00		. SCREEN-REGULATOR INLET	AB,AC AG,AH,	1
28	5607-01		. CASE-REGULATOR	AB,AC, AG,AH	1

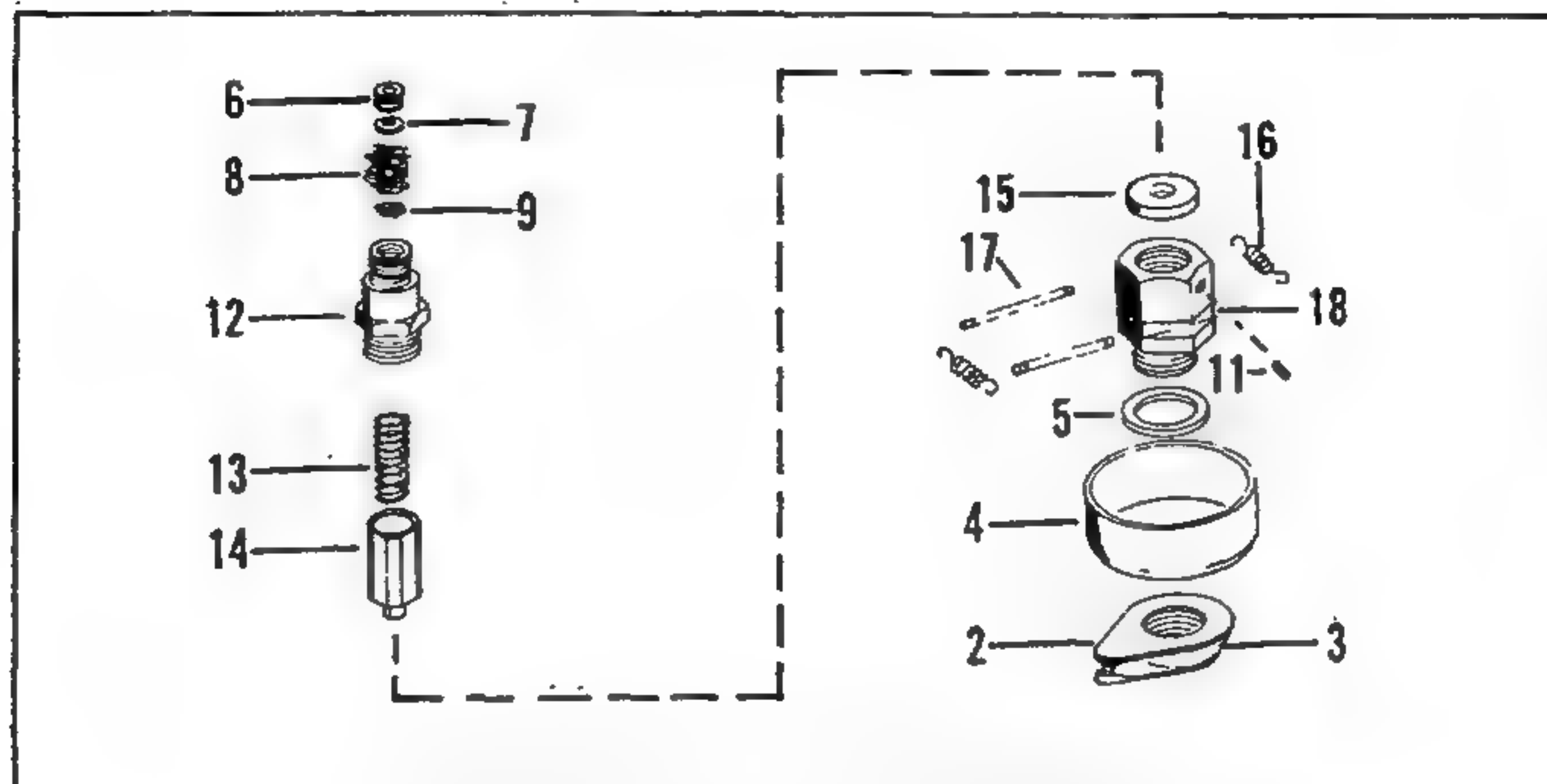
- ITEM NOT ILLUSTRATED

35-30-78

Page 1015

May 31/89

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



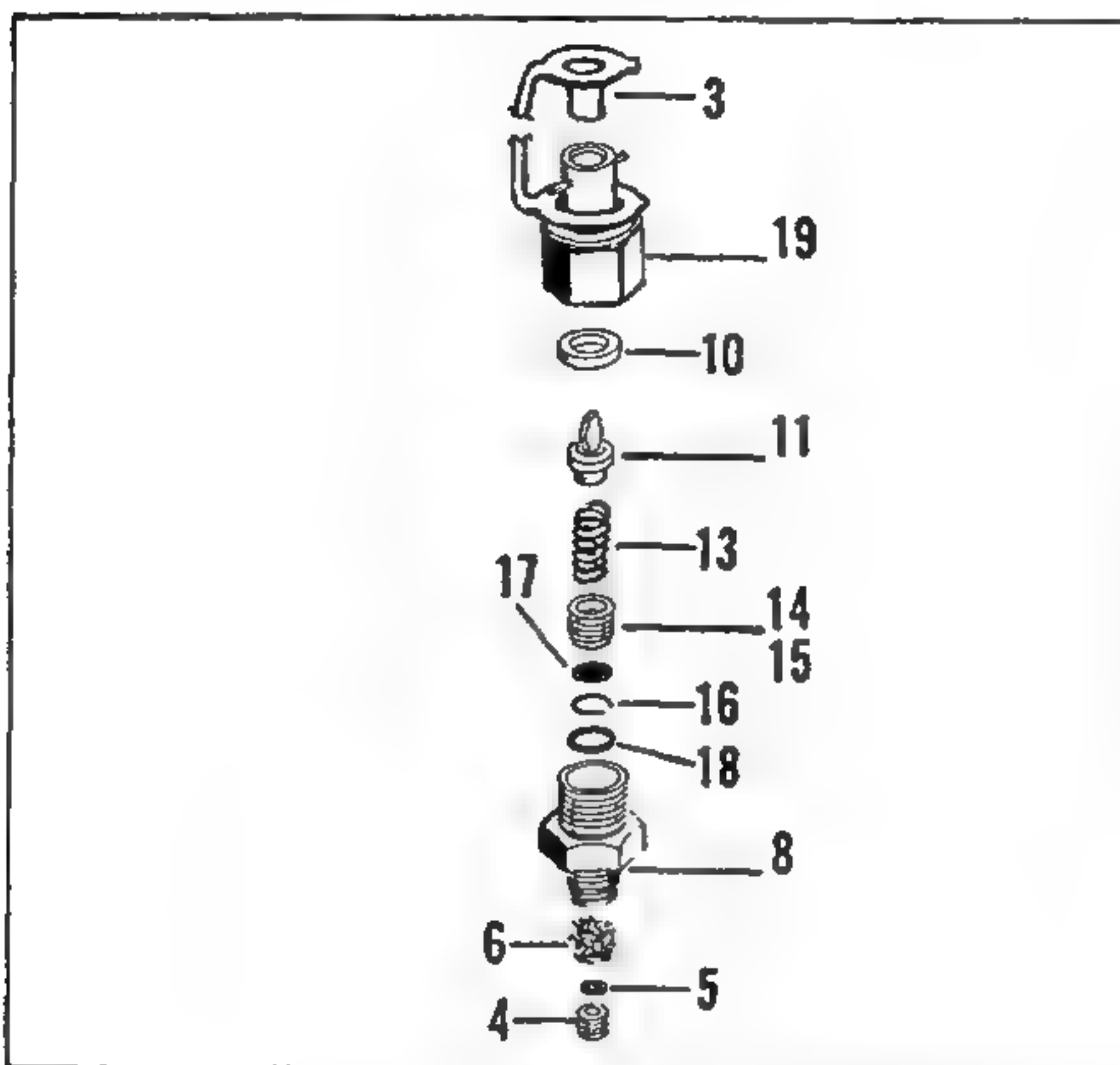
Outlet Assembly, P/N 5041
Figure 4

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
4-1	5041		OUTLET ASSY (SEE ITEM 28, IPL FIGURE 2 FOR NHA)	V	RF
2	29558-1		• COVER-DUST (ATTACHING PARTS)	V	1
3	29557		• NUT (SUPPLIED AS PART OF 5041-1) -----*	V	1
4	5042-1		• CAP	V	1
5	5042-2		• WASHER	V	1
6	5014-1		• SCREW-ORIFICE ADJ	V	1
7	5013-1		• SCREEN	V	1
8	EC9-5U		• CORD (V21343)	V	AR
9	5013-1		• SCREEN	V	1
-10	5041-1		• COUPLING ASSEMBLY	V	1
11	29567		• • SETSCREW	V	1
12	29550		• • BODY	V	1
13	29551		• • SPRING	V	1
14	29552		• • VALVE	V	1
15	29553-1		• • SEAT-VALVE	V	1
16	29555		• • SPRING-LATCH	V	2
17	29556		• • PIN-LATCH	V	2
18	29554		• • CASE	V	1

- ITEM NOT ILLUSTRATED

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



Outlet Assembly, P/N 5009 and 800503-00
Figure 5

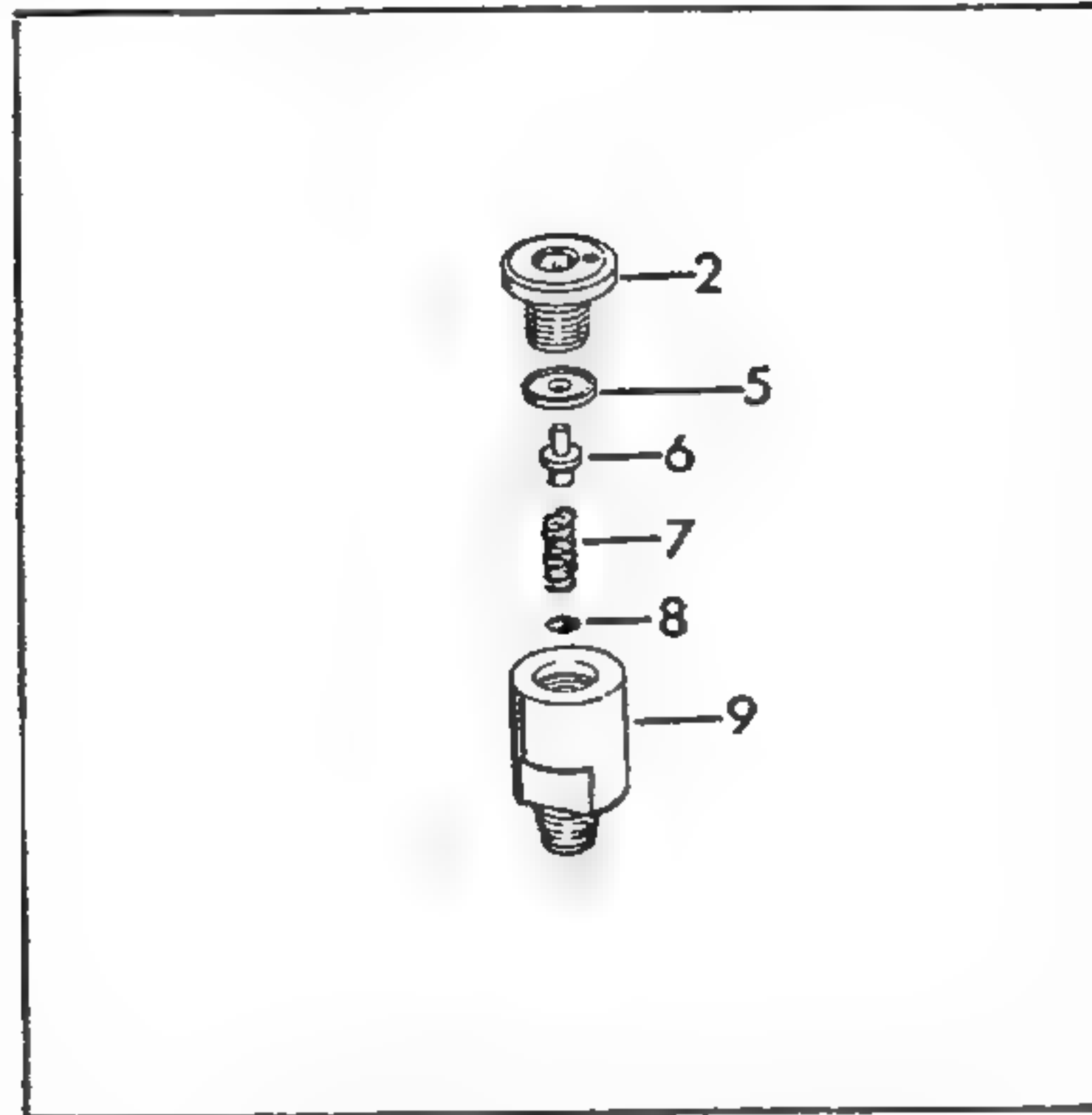
FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
5-1	5009-00		OUTLET ASSY (SEE ITEM 29, IPL FIGURE 2 FOR NHA)	U	RF
-2	800503-00		OUTLET ASSY (SEE ITEM 34, IPL FIGURE 2 FOR NHA)	AE	RF
3	59447-00		. COVER-DUST	AE,U	1
4	5014		. SCREW-ORIFICE ADJ	U	1
5	5013		. SCREEN-RETAINING	U	1
6	EC9-5U		. CORD (V21343)	U	AR
-7	5009-01		. OUTLET ASSEMBLY	U	1
8	10001494		. . STUD	AE,U	1
-9			DELETED		
10	5065-8		. . GASKET	AE,U	1
11	24823		. . VALVE	AE,U	1
-12			DELETED		
13	5065-6		. . SPRING	AE,U	1
14	10001493		. . FLOW PORT	U	1
15	10001112		. . FLOW PORT	AE	1
16	5065-2		. . RING-RETAINING	U	1
17	5065-4		. . FILTER-OUTLET	U	1
18	5065-3		. . GASKET	AE,U	1
19	24825		. . RECEPTACLE	AE,U	1

- ITEM NOT ILLUSTRATED

35-30-78

Page 1017
May 31/89

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

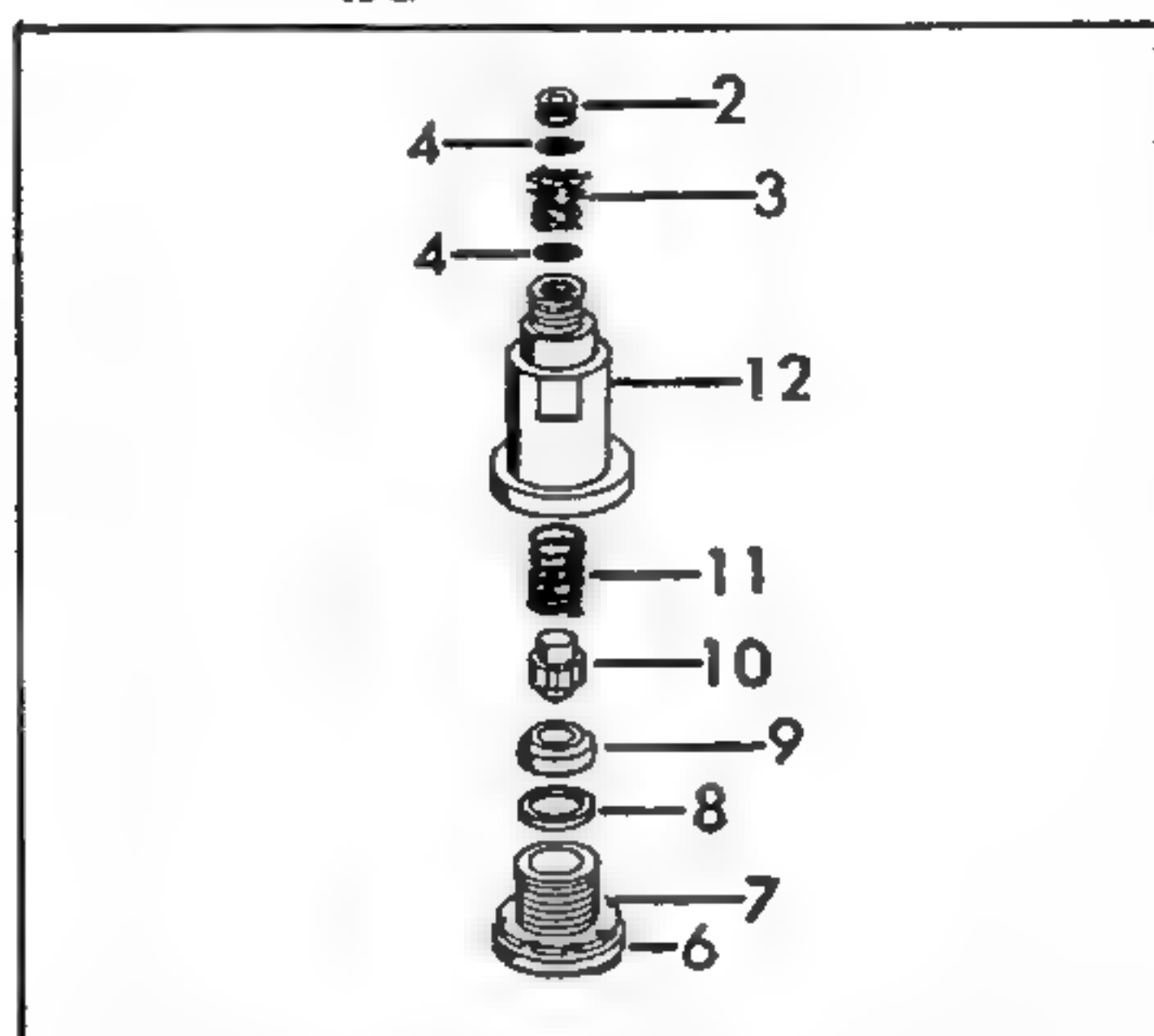


Outlet Assembly, P/N 8572
Figure 6

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
6-1	8572-02		OUTLET ASSY (SEE ITEM 32, IPL FIGURE 2 FOR NHA)	Z	RF
2	802233-01		. BODY AND PIN ASSEMBLY	Z	1
-3	27434-01		. . PIN-SPIROL (V00287)	Z	1
-4	10005326		. . WASHER	Z	1
-5	10005272		. . BODY	Z	1
6	8579-00		. GASKET	Z	1
7	8578-00		. POPPET	Z	1
8	8569-1		. SPRING	Z	1
9	A1119		. FILTER-INLET	Z	1
10	8587-01		. ADAPTER	Z	1

- ITEM NOT ILLUSTRATED

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

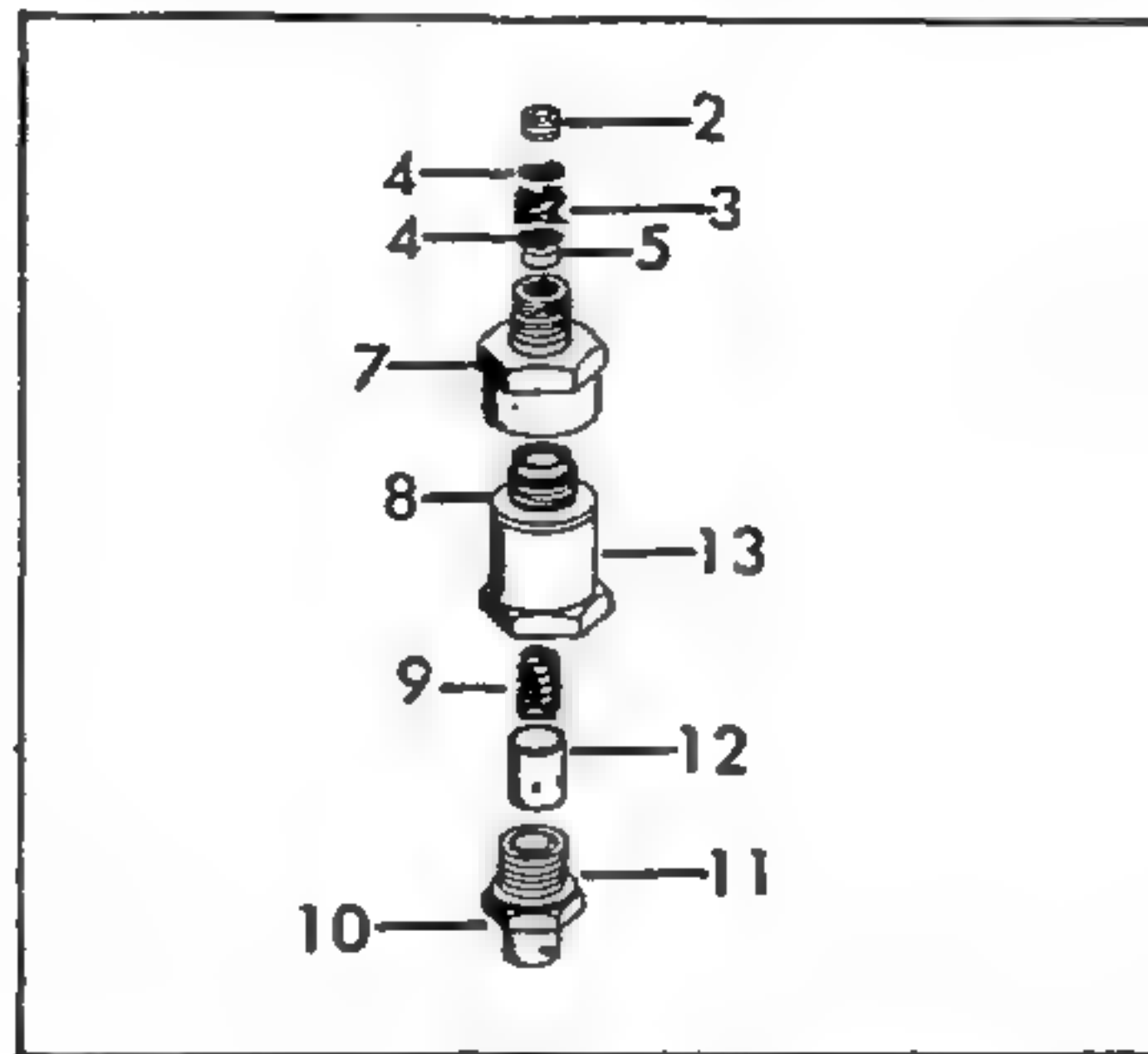


Outlet Assembly, P/N 5507
Figure 7

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
7-1	5507		OUTLET ASSY (SEE ITEM 30, IPL FIGURE 2 FOR NHA)	Y	RF
2	5014-1		. SCREW-ORIFICE ADJ	Y	1
3	EC9-5U		. CORD (V21343)	Y	AR
4	5013-1		. SCREEN	Y	2
-5	5533		. OUTLET SUBASSEMBLY	Y	1
6	210331		. . GUIDE ASSEMBLY - INSERT (V49315)	Y	1
7	832100		. . WASHER-LOCK (V49315)	Y	1
8	832402		. . WASHER-RET (V49315)	Y	1
9	614010		. . WASHER-SEAT (V49315)	Y	1
10	520058		. . SEAT (V49315)	Y	1
11	833012		. . SPRING (V49315)	Y	1
12	5533-1		. . BODY	Y	1

- ITEM NOT ILLUSTRATED

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

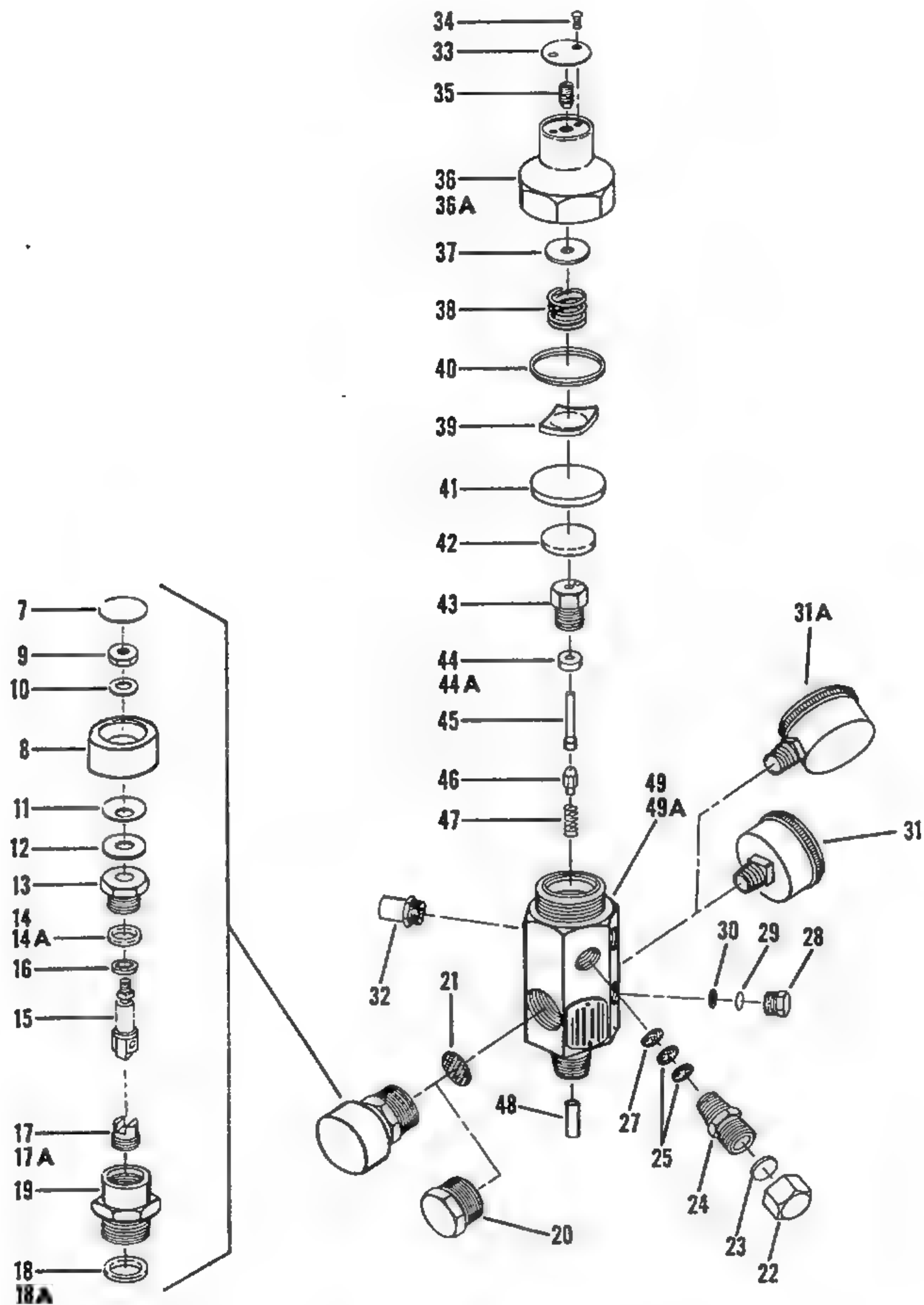


Outlet Assembly, P/N 5052
Figure 8

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
8-1	5052		OUTLET ASSY (SEE ITEM 31, IPL FIGURE 2 FOR NHA)	W	RF
2	5014		. SCREW-ORIFICE ADJ	W	1
3	EC9-5U		. CORD (V21343)	W	AR
4	5013		. SCREEN	W	2
5	5058		. WASHER	W	1
-6	5052-2		. COUPLING	W	1
7	5067-1		. . BASE	W	1
8	5067-2		. . GASKET-BODY	W	1
9	5067-4		. . SPRING	W	1
10	5067-7		. . SEAT-VALVE	W	1
11	5067-6		. . GASKET-VALVE SEAT	W	1
12	5067-5		. . RETAINER	W	1
13	5067-3		. . BODY	W	1

- ITEM NOT ILLUSTRATED

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



Oxygen Regulator Assembly, 5510 Series
Figure 9

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
9-1	5510		REGULATOR ASSY-OXYGEN (SEE ITEM 38, IPL FIGURE 2 FOR NHA) (SUPERSEDED BY 5510-10 SB35-48)	H	RF
-1A	5510-10		REGULATOR ASSY-OXYGEN (SEE ITEM 38A, IPL FIGURE 2 FOR NHA) (SUPERSEDES 5510 SB35-48)	AZ	RF
-2	5510-3		REGULATOR ASSY-OXYGEN (SEE ITEM 39, IPL FIGURE 2 FOR NHA) (SUPERSEDED BY 5510-13 SB35-48)	J	RF
-2A	5510-13		REGULATOR ASSY-OXYGEN (SEE ITEM 39A, IPL FIGURE 2 FOR NHA) (SUPERSEDES 5510-3 SB35-48)	BA	RF
-3	5510-4		REGULATOR ASSY-OXYGEN (SEE ITEM 40, IPL FIGURE 2 FOR NHA) (SUPERSEDED BY 5510-14 SB35-48)	K	RF
-3A	5510-14		REGULATOR ASSY-OXYGEN (SEE ITEM 40A, IPL FIGURE 2 FOR NHA) (SUPERSEDES 5510-4 SB35-48)	BB	RF
-4	5510-5		REGULATOR ASSY-OXYGEN (SEE ITEM 41, IPL FIGURE 2 FOR NHA) (SUPERSEDED BY 5510-15 SB35-48)	L	RF
-4A	5510-15		REGULATOR ASSY-OXYGEN (SEE ITEM 41A, IPL FIGURE 2 FOR NHA) (SUPERSEDES 5510-5 SB35-48)	BC	RF
-5 -5A	5510-7		DELETED REGULATOR ASSY-OXYGEN (SEE ITEM 42A, IPL FIGURE 2 FOR NHA) (SUPERSEDED BY 5510-17 SB35-48)	AR	RF
-5B	5510-17		REGULATOR ASSY-OXYGEN SEE ITEM 42B, IPL FIGURE 2 FOR NHA) (SUPERSEDES 5510-7 SB35-48)	BD	RF
-5C	5510-8		REGULATOR ASSY-OXYGEN (SEE ITEM 42C, IPL FIGURE 2 FOR NHA) (SUPERSEDED BY 5510-18 SB35-48)	AW	RF

- ITEM NOT ILLUSTRATED

5000

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
9-5D	5510-18		REGULATOR ASSY-OXYGEN (SEE ITEM 42D IPL FIGURE 2 FOR NHA) (SUPERSEDES 5510-8 SB35-48)	BE	RF
-5E	5510-9		REGULATOR ASSY-OXYGEN (SEE ITEM 42E, IPL FIGURE 2 FOR NHA) (SUPERSEDED BY 5510-19 SB35-48)	AT	RF
-5F	5510-19		REGULATOR ASSY-OXYGEN (SEE ITEM 42F, IPL FIGURE 2 FOR NHA) (SUPERSEDES 5510-9 SB35-48)	BF	RF
-5G	5510-20		REGULATOR ASSY-OXYGEN (SEE ITEM 42G, IPL FIGURE 2 FOR NHA)	BG	RF
-6	5520-09		• VALVE KIT-ON-OFF (SUPERSEDED BY 5520-17)	H,J,L, AR,AW, AT	1
-6A	5520-17		• VALVE KIT-ON-OFF (SUPERSEDES 5510-09) (SB35-48)	AZ,BA, BC,BD, BE,BF, BG	1
7	22427-1		• . PLATE-INST	H,J,L, AR,AW, AT,AZ, BA,BC, BD,BE, BF,BG	1
8	23274-3		• . HANDLE	H,J,L, AR,AW, AT,AZ, BA,BC, BD,BE, BF,BG	1
9	AN345-10		(ATTACHING PARTS) • . NUT	H,J,L, AR,AW, AT,AZ, BA,BC, BD,BE, BF,BG	1

- ITEM NOT ILLUSTRATED

35-30-78

Page 1023
Jan 31/86

5000

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
9 17	5518		. . HEAD ASSEMBLY-VALVE (SUPERSEDED BY 802883-01) (SB35-48)	H,J,L, AR,AW, AT	1
17A	802883-01		. . HEAD ASSEMBLY-VALVE (SUPERSEDES 5518) (SB35-48)	AZ,BA, BC,BD, BE,BF, BG	1
18	18037-01		. . PACKING-PREFORMED (SUPERSEDED BY 55620-02) (SB35-48)	H,J,L, AR,AW, AT	1
18A	55620-02		. . PACKING-PREFORMED (SUPERSEDES 18037-01) (SB35-48)	AZ,BA, BC,BD, BE,BF, BG	1
19	23393-1		. . BUSHING-VALVE ADAPTER	H,J,L, AR,AW, AT,AZ, BA,BC, BD,BE, BF,BG	1
20	13166-00		. PLUG-ON-OFF VALVE	K,BB	1
21	5522-00		. FILTER	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
22	5016-00		. CAP-FILTER	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
23	5023-00		. SEAT-FILLER CAP	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1

- ITEM NOT ILLUSTRATED

35-30-78

Page 1025
May 31/89

SCOTT

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
9 24	5093-01		. VALVE ASSY CHARGING	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
25	8385-00		. FILTER	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
-26	8385-00		. FILTER	H,J,L, AR,AW, AT,AZ, BA,BC, BD,BE, BF,BG	1
27	8384-00		. FILTER	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
28	6363-01		. PLUG-SAFETY	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
29	6364-00		. DISC-SAFETY PLUG	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1

- ITEM NOT ILLUSTRATED

35-30-78

Page 1026
Jan 31/86

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
9 30	6370-00		. WASHER-SAFETY PLUG	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
31	2661-03		. GAUGE-PRESSURE	H,J,K, L,AT, AZ,BA, BB,BC, BF	1
31A	802821-01		. GAUGE-PRESSURE	AR,AW, BD,BE, BG	1
32	5043-14		. VALVE-RELIEF	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
33	5056-00		. PLATE-ID	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	
34	59553-00		(ATTACHING PARTS) . SCREW	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	2
35	37008-01		-----*----- . SETSCREW - LOC-WEL	H,J, AR,AW, AT,AZ, BA,BB, BC,BD, BE,BF, BG	1

R

- ITEM NOT ILLUSTRATED

35-30-78

Page 1027
May 31/89

5000

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
9 36	5005-01		. CASE-SPRING (SUPERSEDED BY 5005-03) (SB35-48)	H,J,K, L,AR, AW,AT	1
36A	5005-03		. CASE-SPRING (SUPERSEDES 5005-01) (SB35-48)	AZ,BA, BB,BC, BD,BE, BF,BG	1
37	8561-00		. GUIDE-SPRING	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
38	5003-00		. SPRING-ADJUSTING	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
39	5034-00		. PLATE-DIAPHRAGM	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
40	5033-00		. RING-SLIP	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	3
41	5032-01		. DIAPHRAGM	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1

- ITEM NOT ILLUSTRATED

35-30-78

Page 1028
Jan 31/86

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
9 42	5031-00		. PLATE-THRUST	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
43	5030-01		. HOLDER-SEAT	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
44	5029-00		. SEAT (SUPERSEDED BY 803129-01) (SB35-48)	H,J,K, L,AR, AW,AT	1
44A	803129-01		. SEAT (SUPERSEDES 5029-00) (SB35-48)	AZ,BA, BB,BC, BD,BE, BF,BG	1
45	5028-00		. PIN-THRUST	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
46	5002-00		. GUIDE-THRUST	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1
47	5027-00		. SPRING-MARGINAL	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG	1

- ITEM NOT ILLUSTRATED

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
9 48	5018-00		. TUBE-DRAIN	H,J,K, L,AR, AW,AT, AZ,BA, BB,BC, BD,BE, BF,BG H,K	1
49	5053-07		. BODY-REGULATOR (SUPERSEDED BY 27170-01) (SB35-48)		1
49A	27170-01		. BODY-REGULATOR (SUPERSEDES 5053-07) (SB35-48)	AZ,BB, BG	1
-50	5053-03		. BODY-REGULATOR (SUPERSEDED BY 27170-04) (SB35-48)	J,AR, AW	1
-50A	27170-03		. BODY-REGULATOR (SUPERSEDES 5053-03) (SB35-48)	BA,BD, BE	1
-51	5053-09		. BODY-REGULATOR (SUPERSEDED BY 27170-02) (SB35-48)	L	1
-51A	27170-02		. BODY-REGULATOR (SUPERSEDES 5053-09) (SB35-48)	BC	1
-52	5053-15		. BODY-REGULATOR (SUPERSEDED BY 27170-04) (SB35-48)	AT	1
-52A	27170-04		. BODY-REGULATOR (SUPERSEDES 5053-15) (SB35-48)	BF	1

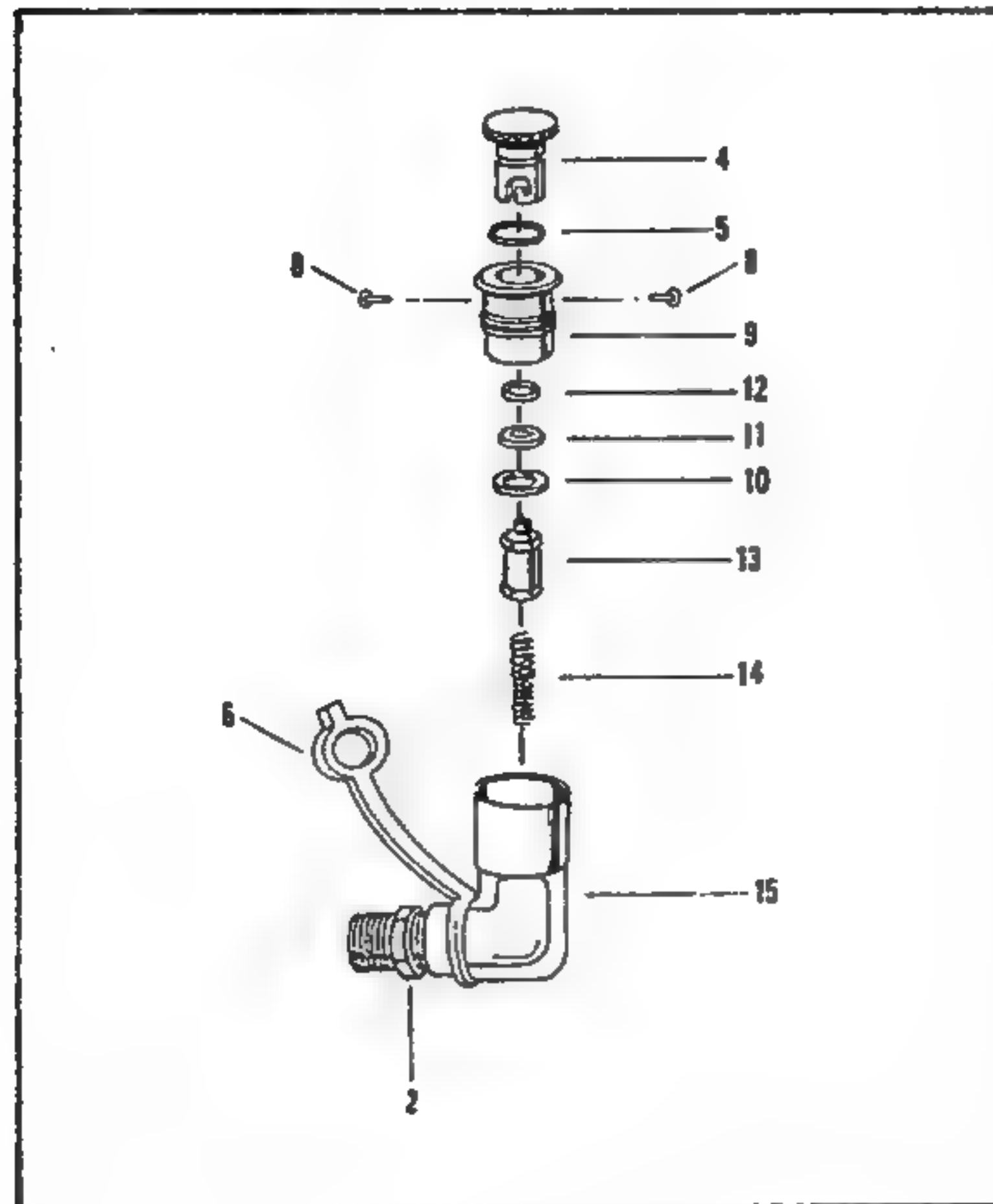
ITEM NOT ILLUSTRATED

35-30-78

Page 1030
Jan 31/86

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL



Outlet Assembly P/N 802863-02
Figure 10

FIG. ITEM	PART NUMBER	AIRLINE STOCK NO.	NOMENCLATURE 1234567	EFF CODE	UNITS PER ASSY
10-1	802863-02		OUTLET ASSY-OXYGEN	AY	RF
2	AN911-1D		. NIPPLE	AY	1
-3	802874-01		. PLUG ASSY-DUST	AY	1
4	59477-01		. . COVER-DUST	AY	1
5	36862-05		. . PACKING-PREFORMED	AY	1
6	802877-01		. . PLUG-DUST	AY	1
-7	802061-00		. SLEEVE AND PIN ASSY	AY	1
8	10004844		. . PIN	AY	2
9	10004845		. . SLEEVE-INSERT	AY	1
10	10004840		. SEAL	AY	1
11	10004841		. RETAINER	AY	1
12	MS9068-008		. PACKING-PREFORMED	AY	1
13	10004839		. POPPET	AY	1
14	10004838		. SPRING	AY	1
15	10005750		. BODY-OUTLET	AY	1

- ITEM NOT ILLUSTRATED

35-30-78

Page 1031
Jan 25/83

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	TTL REQ
A1119		6	9	1
A1120B		3	24	1
A1126		3	18	1
A1215-1		3	17	1
AN345-10		9	9	1
AN911-10		10	2	1
EC9-5U		4	8	AR
		5	6	
		7	3	
		8	3	
MS20470A2-2		3	10	4
		3	13	
MS33506-212		3	7	3
MS35206-213		3	21	2
MS35333-36		3	22	2
MS9068-008		10	12	1
UOX1-8		2	37	2
WWD120		2	24	1
WWD122		2	14	1
WWD176		2	-15	2
		2	-25	
WWD224		2	-16	2
		2	-26	
		2	-27	
10001112		5	15	1
10001296		2	13	1
10001297		3	9	1
10001493		5	14	1
10001494		5	8	1
10003566		2	-45	1
10004838		10	14	1
10004839		10	13	1
10004840		10	10	1
10004841		10	11	1
10004844		10	8	2
10004845		10	9	1
10005272		6	-5	1
10005326		6	-4	1
10005750		10	15	1
10005922		2	-34C	1
10006017		2	44A	1
10006936		2	44	1
1110-00		9	10	1

35-30-78

Page 1032
May 31/89

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	TTL REQ
13166		9	20	1
13374-00		3	16	1
14807		2	52	1
18037-01		9	18	1
210331		7	6	1
22427-1		9	7	1
22445-1		9	11	1
23274-3		9	8	1
23393-1		9	19	1
23394-01		9	13	1
24823		5	11	1
24825		5	19	1
2661-03		9	31	1
27170-01		9	49A	1
27170-02		9	-51A	1
27170-03		9	-50A	1
27170-04		9	-52A	1
27434-01		6	-3	1
28672-211		2	-55B	2
29550		4	12	1
29551		4	13	1
29552		4	14	1
29553-1		4	15	1
29554		4	18	1
29555		4	16	2
29556		4	17	1
29557		4	3	1
29558-1		4	2	1
29559		2	-54	1
29567		4	11	1
36728-01		2	-34A	1
36862-05		10	5	1
36879-01		2	59	1
37008-01		9	35	1
5002-00		9	46	1
5003-00		9	38	1
5005-01		9	36	1
5005-03		9	36A	1
5009-00		2	-29	1
		5	-1	RF
5009-01		5	-7	1
5013		5	5	1
		8	4	2

35-30-78

Page 1033
Jan 31/86



5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	TTL REQ
5013-1		4	7	1
		4	9	1
		7	4	2
5014		5	4	1
		8	2	1
5014-1		4	6	1
		7	2	1
5016		9	22	1
5018		9	48	1
5023		9	23	1
5027		9	47	1
5028-00		9	45	1
5029-00		9	44	1
5030-01		9	43	1
5031-00		9	42	1
5032-01		9	41	1
5033-00		9	40	3
5034-00		9	39	1
5041		2	28	1
		4	-1	RF
5041-1		4	-10	1
5042-1		4	4	1
5042-2		4	5	1
5043-14		9	32	1
5052		2	-31	1
		8	-1	RF
5052-2		8	-6	1
5053-03		9	-50	1
5053-07		9	49	1
5053-09		9	-51	1
5053-15		9	52	1
5056-00		9	33	1
5057		2	35	1
5057-1		2	-36	1
5058		8	5	1
5065-10		2	-53	1
		2	-53A	2
5065-2		5	16	1
5065-3		5	18	1
5065-4		5	17	1
5065-6		5	13	1
5065-8		5	10	1
5067-1		8	7	1
5067-2		8	8	1

35-30-78

Page 1034
Jan 31/86



**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	TTL REQ
5067-3		8	13	1
5067-4		8	9	1
5067-5		8	12	1
5067-6		8	11	1
5067-7		8	10	1
5093-01		9	24	1
520058		7	10	1
5500 SERIES		2	-1	1
5507		2	-30	1
		7	-1	RF
5510		2	38	1
		9	-1	RF
5510-10		2	38A	1
		9	-1A	RF
5510-13		2	-39A	1
		9	-2A	RF
5510-14		2	-40A	1
		9	-3A	RF
5510-15		2	-41A	1
		9	-4A	RF
5510-17		2	-42B	1
		9	-5B	RF
5510-18		2	-42D	1
		9	-5D	RF
5510-19		2	-42F	1
		9	-5F	RF
5510-20		2	-42G	1
		9	-5G	RF
5510-3		2	-39	1
		9	-2	RF
5510-4		2	-40	1
		9	-3	RF
5510-5		2	-41	1
		9	-4	RF
5510-7		2	-42A	1
		9	-5	RF
5510-8		2	-42C	1
		9	-5C	RF
5510-9		2	-42E	1
		9	-5E	RF
5511		9	12	2
5513		9	15	1
5517		9	16	1
5518		9	17	1

35-30-78

Page 1035
Jan 31/86

SCOTT

**5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL**

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	TTL REQ
5520-09		9	-6	1
5520-17		9	-6A	1
5522-00		9	21	1
5533		7	-5	1
5533-1		7	12	1
55620-01		9	14A	1
55620-02		9	18A	1
5600 SERIES		2	-2	1
5601		2	4	1
5601B		2	-5	1
5601C		2	-6	1
5602		2	3	1
5603		3	25	1
5606		3	26	1
5607-01		3	28	1
5608		2	43	1
59270-00		2	55	1
		2	-55A	2
59447-00		5	3	1
59477-01		10	4	1
59553-00		9	34	2
59598-00		9	14	1
59602-00		2	11	4
6050-1		3	14	1
6050C		3	-5	1
6055E		3	20	1
6066-00		3	23	1
6084-1		2	-61	1
6084-2		2	-62	1
6084-3		2	60	1
6084-4		2	-63	1
6084-5		2	-64	1
6084-6		2	-65	1
6084-7		2	-66	1
614010		7	9	1
6363-01		9	28	1
6364-00		9	29	1
6370-00		9	30	1
6375-4		3	8	1
6378		3	11	1
6379-2C		2	7	1
		3	-1	RF
6379-2D		2	-8	1
		3	-2	RF

35-30-78

Page 1036
May 31/89

SCOTT

5500 & 5600 SERIES COMPONENT MAINTENANCE MANUAL WITH IPL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	TTL REQ
6582		3	15	1
6583		3	13C	1
6584		3	13D	1
6586		3	13A	1
6588		3	13B	1
6597		3	12	1
6812		3	27	1
6818		2	-33	1
800503-00		2	-34	1
		5	-2	RF
800649-00		2	-9	1
		3	-3	RF
800649-01		2	-10	1
		3	-4	RF
800651-00		3	6	1
801658-00		2	-18	1
801660-00		2	17	1
		2	56	1
801660-01		2	-20	1
801660-03		2	-21	1
801660-05		2	-22	1
801662-00		2	-19	1
		2	57	1
801663-00		2	-23	1
801807-01		2	-46	1
801807-02		2	-48	1
801807-03		2	-49	1
801808-01		2	-47	1
801808-02		2	-50	1
801808-03		2	-51	1
801808-05		2	-51A	1
801809-01		2	58	1
		2	-58A	
802061-00		10	-7	1
802233-01		6	2	1
802821-01		9	31A	1
802863-02		2	-34B	1
		10	-1	RF
802874-01		10	-3	1
802877-01		10	6	1
802883-01		9	17A	1
803129-01		9	44A	1
803177-01		2	-51B	1
832100		7	7	1

35-30-78

Page 1037
May 31/89

SCOTT

5500 & 5600 SERIES
COMPONENT MAINTENANCE MANUAL WITH IPL

PART NUMBER	AIRLINE PART NUMBER	FIGURE	ITEM	TTL REQ
832402		7	8	1
833012		7	11	1
8384-00		9	27	1
8385-00		9	25	1
		9	-26	1
8561		9	37	1
8569-1		6	8	1
8572-02		2	-32	1
		6	-1	RF
8678-00		6	7	1
8579-00		6	6	1
8587-01		6	10	1
9036		3	19	2

35-30-78

Page 1038
May 31/89